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ENCYCLOPÆDIA OF THE

SCIENCE AND PRACTICE OF OBSTETRICS

WITH EIGHTY-FOUR LARGE PLATES AND NUMEROUS WOOD CUTS.

Edited by F. H. GETCHELL, M.D., Fellow of the College of Physicians; Member of the Pathological Society; Member of the County Medical Society, Philadelphia; Corresponding Member of the Gynæcological Society of Boston; Late Gynæcologist to the Jefferson College Hospital; Author of "Maternal Management of Infancy, etc.

In the publication of this work we have endeavored to present to the profession in a really available form the best contributions of the ablest obstetric authors, together with an atlas of full-page illustrations, which it is believed will be of the greatest practical utility to the practitioner in this very responsible branch of the profession.

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Professor of Obstetrics and Diseases of Infants in the Hahnemann Medical College of Pa.

In their selection of an editor the publishers were fortunate in procuring the services of Dr. Getchell; for there are but few who possess the requisite knowledge and ability to carry out a work such as this is designed to be, to a successful conclusion, as the gentleman named, who must have given a great deal of time and forethought to each author before introducing his opinions, stamped with his own approval, to his readers. If any of our readers wish to pessess a really valuable work on obstetrics, illustrated in a magnificent manner, by all means order this book. THE MEDICAL BULLETIN.

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I expect to receive great benefit from the examination, and shall be very glad to show them to my class at Dartmouth.—HENRY M. FIELD, M.D., Prof. Therapeutics, Dartmouth Med. Col.; Sec'y Gynæc. Soc., Boston, etc.

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ORIGINAL ARTICLES.

INCONTINENCE OF URINE DUE TO ATRESIA VAGINÆ—OPERATION—RECOVERY.

BY JULIUS KOHL, M.D., BELLEVILLE, ILL.

Read before the St. Clair County (Ill.) Medical Society, June 5, 1890.

Miss B., æt. 35, unmarried, was brought to me January, 1890. She had been suffering with diurnal and nocturnal incontinence of urine for the last three or four years. She had received all sorts of treatment. For the last seven months she had been an inmate of one of the prominent hospitals in the city of St. Louis, where she had received treatment at the hands of renowned physicians and surgeons. Finding no relief, she was removed. Her condition was wretched. The highly acidulated urine was continually dribbling from her, causing, aside from the offensive smell, very painful erosious of the perinæum and legs. Belonging to the better class of society, her friends were very anxious to have something done for her.

I proposed an examination of the parts affected, which was granted very reluctantly, as the patient, although very willing, was in a fearful state of excitement. The examination, however, proved a complete failure, because the very touch of the genital organs was so painful to the patient that it almost threw her into spasms. Another examination under cloroform was not granted at the time.

About two weeks afterwards I was handed a letter from the former attending surgeons stating that the diagnosis was "some neurosis," and that the incontinence would only yield to time, etc.

I have no use for the word neurosis. It expresses about as much as the words scrofula, hysteria and other old timers. I believe in a clearer definition of the local structural lesions. I argued with the patient and friends that I was convinced that there were local conditions existing, which demanded the minutest and closest inspection, and that the very fact of so much pain during an examination proved my statement. I demanded an examination under anæsthesia, and it was granted.

This I made with the very able assistance of my friend, Dr. L. Bechtold of our city. We found the bladder and urethra in a normal condition; the clitoris, labia majora et minora congested and as stated above, covered with erosions, and furthermore a complete artresia vaginæ. There existed only enough opening to permit the escape of the menstrual discharges, which were regular. An ordinary probe could also be introduced.

I had prepared myself with the necessary outfit, and the patient on the table being in a fine condition for an operation, we concluded to perform it right then and there.

Accordingly, I introduced a sharp pointed bistouri into the the small opening. With the left forefinger in the rectum to protect it, I cut downwards, then reversed the instrument and cut upward toward the pubes. I made two small lateral incisions, and finished the operation cautiously with the fingers, tearing all the strictures and adhesions clear up the os. Next I introduced a large woolen tampon, which I kept there for weeks, changing it from time to time. Not a drop of urine has dribbled away since. For a few days even the catheter had to be used to empty the bladder. Complete control has now been established for months. The general hyperæsthesia of the patient, which was of the worst kind, has all disappeared. Heretofore the least noise,the ringing of the door bell, would almost convulse the patient. At present the discharge of a gun, would not materially molest her. The general health has been restored completely.

Why did this patient not always suffer with incontinence, the same conditions existing? I reason this way: From some cause or other there was produced an inflammatory condition, probably from supra hymenial retention of menstrual or leucorrhœal discharge. The vaginismus following, spread over and called into sympathy the nerves of the adjoining viscus and urethra. Be it as it may, however, this case throws another bombshell into such false conclusions as are only too often disposed of with a vague term of an imaginary nervous condition.

Surgeons must deal with facts. Since I met the above case, I came across another in which I accidently found an artresia vaginæ. A virgin had signs of metritis.

During the investigation, I tried to make a digital examination per vaginam. Did not succeed of course. The patient nearly fainted from pain. I dealt with the case in the same manner as the one described. The incident was fortunate for the patient, as she contemplates marriage.

SUBMUCOUS RESECTION OF CARTILAGE IN DEVIATIONS OF THE NASAL SEPTUM; A NEW OPERATION.

BY JOHN B. ROBERTS, M. D., PHILADELPHIA, PA.

There are cases in which simple division of the nasal septum, with the use of pins to hold the divided partition properly in place, is not efficacious, because the cartilage contains too much tissue to be held in a straight line after its abnormal curves have been corrected. It is easily understood that, since the shortest distance between two points is a straight line, a curved or bent septum forced into a straight line by dilatation of the nostril or by incision, has a tendency to reproduce the curvature within a few weeks after the operation. In such cases it is usually necessary to remove a

portion of the septal cartilage, if permanence is to be given to the straight position obtained by the operation. This is sometimes done by excision of a portion of the septum by means of a nasal punch or a knife, thus leaving an opening between the two nares. The operation which I describe, and which is a resection of the cartilage beneath the mucous membrane, makes no opening between the two nares, and yet gets rid of the surplus septal tissue.

The operation should be commenced by dilatation of the occluded nostril with the finger or a pair of dilating forceps; the mucous membrane covering the septum of of the occluded side is then incised by means of a blunt tenotome. The incision should be a long curved one, with the convexity toward the floor of the nostril, and should be commenced as far back as is necessary to make a flap large enough to uncover the curved piece of cartilage. A flat, dull instrument is then slipped under the mucous membrane and used to separate this membrane from the triangular cartilage and vomer. A finger in the opposite nostril gives rigidity to the septum during the manipulations. After the large flap of mucous membrane has been elevated, a blunt-pointed tenotome is thrust under the mucous membrane, which hangs down like a curtain, and is used to cut out an elliptical portion of the septal cartilage corresponding in size with the angle or curve in the deviated septum that the surgeon desires to remove. During this stage of the operation the little finger of the other hand in the opposite nostril is used to prevent perforation of the mucous membrane in the nostril opposite that of operation. A blunt instrument is then thrust through the incision in the cartilage, and used to separate the portion of cartilage, which is to be taken out, from its mucous membrane on the side opposite the occluded nostril. The elliptical piece to be resected is then lifted out with forceps and the large flap of mucous membrane permitted to drop in place like a curtain. One or two sutures of catgut may then be put in the mucous membrane at the anterior portion of the wound in order to hold the flap in place.

The operation is readily performed and seems to me a distinct improvement in nasal surgery. So far as I know it is novel.

My observations have led me to believe that a great many cases of crooked nose or occluded nares are not due to fracture or congenital deformity, but to interstitial growth of the septal cartilage. It is impossible to increase the area of a partition situated between fixed borders without causing the partition to assume a curve. The triangular cartilage cannot extend upward, downward, or backward, because of its margins in these directions being fixed, hence, when it increases in area by abnormal growth it assumes curves and distorts the anterior portion of the nose.

I have recently operated upon a case in which the crookedness of the nose was very marked, and had been increasing within the last few years. In this case it was quite evident that the deformity depended upon a double curve of the septal cartilage, which was apparently due to abnormal interstitial growth.

Submucous resection of the cartilage is, it seems to me, a good method for relieving many cases of nasal deformity. The removal of angular or curved portions of cartilage without cutting away the mucous tissue is an operation giving rise to great hæmorrhage, although, of course, the bleeding is free.

I show to night an elliptical section of cartilage the result of an operation done by this method. In this case, as the members will see, I cut out a portion of the bone as well as of the catilage, and I subsequently removed another small piece of bone at the back part of the nares, by using a saw pushed under the mucous flap. The small portion of bone attached to the elliptical strip in the specimen was removed by the incisions made with the tenotome. The anterior portion of the bone of the septum is so thin that it is easily cut through with a tenotome.

The relief of nasal obstruction was immediate and very satisfactory in this case.

TRANSLATION.

IMPOTENCE IN THE MALE, AND ITS TREATMENT.[1]

BY DR. LEOPOLD CASPER, OF BERLIN.

Translated by Wm. N. Beggs, A.B., M.D., St. Louis.

[CONCLUSION.]

Electricity, which may be used in the form of the galvanic or faradic current of Franklinization, ranks with the baths in efficiency. What we know of its effects is derived entirely from experience. This teaches us, however, that we may employ all three forms in the treatment of impotence.

The constant current, according to our experience, takes the first rank to-day. Schulz[41] and Benedict[42] have shown how favorably it effects the vis sexualis. The parts which must be specially subjected to the influence of the current are the spinal cord, penis, testes, and perineal muscles. For this purpose there are many different methods, of which one or several may be employed in succession.

At first I am accustomed to place one electrode over some point to the left of the column and travel up and down with the other to the right of the processi spinosi; then the poles being changed the stationary one is to the right, the movable to the left. The poles consist or metal plates covered with moist sponge or leather. The strength of the current is adjusted to the sensitiveness of the patient; the number of elements should be increased until he feels a lively burning sensation. A

[1]For Parts I., II., III., IV., V., VI., VII., and VIII., see REVIEW of April 26, May 3, 10, 17, 24, 31, June 14 and 28.

reddening of the skin to which the application has been made follows.

So strong a current cannot generally be borne when applied to the perineal muscles. One pole is placed over the sacral spine, the other over the perineum, and left there one or two minutes.

Finally, I pass the constant current through the penis, one electrode being at the perineum, the other stroking the anterior or posterior surface of the penis.

I very seldom use galvanism within the urethra. It is often recommended for cases with frequently recurring spontaneous discharges, which occur without erection. For this purpose a bougie is constructed, through which a wire passes, ending in a metallic conical bulb. This bougie, constructed of hard rubber, is so introduced that the metallic bulb rests in the pars prostatica. It is then attached to the negative pole of a constant battery whose positive sponge pole is placed over the perineum, and a current of not more than 5 milliamperes used. The negative pole should blunt the colliculus seminalis, the ductus ejaculatorii, the sources of the hypersensibility causing the pollutions.

If electricity is to be applied to the testicles, the constant current being the most suitable, very weak currents must be used as the testicles are very sensitive and the nutrition of the testicles will not be increased by strong currents, as is the intention, but rather diminished.

While the constant current is in general the most suitable in conditions of genuine weakness, especially in impotentia organica or paralytica, the induced current is more suitable for the forms of impotentia psychica. It has an irritating, stimulating effect which can be ocularly demonstrated to the patient during the sitting. If the patient sees an erectio penis brought about by the induction brush he is very greatly encouraged.

The testicles, and especially the penis, can be very distinctly stimulated by means of the metal brush. The sponge pole is placed over the perineum or on the spinal cord, while the brush, connected with the inductive apparatus, is carried along the penis; the glans is especially sensitive. The current must, therefore, be increased very gradually; under its influence the skin is reddened so that by means of these manipulations an increased circulation is without a doubt brought about, as well as a stimulation of the peripheral nerve endings. I pass the current, increased in strength until it is slightly painful, through the penis for two minutes, repeating the procedure after three days. Its success, particularly in psychical impotence, is very satisfactory.

Concerning Franklinization, I have no experience of my own. Many authors think it may be dispensed with, others vindicate its great importance in the treatment of sexual impotence, *e. g.*, Stein[43], Beckensteiner[44], and Hammond[45]. The latter prefers it to the galvanic and faradic currents in many respects. According to him it is used in the following way:

"The patient being seated on the insulated platform, the clothing being unremoved, sparks are drawn by means of a large brass ball from along the whole length of the spine. The effect of this is to produce a counter-irritant action and a degree of reflex excitation which no other form of electricity so safely and effectually affords. Each spark leaves a slight elevation of the skin and the whole surface is reddened. The penis frequently enlarges under the influence, and if the sparks be drawn from the sacral region, erections will often be produced, even in cases in which they have not taken place for several months under the influence of venereal excitement.

For exact localization of the application, Hammond uses a copper plate surrounded with a perforated glass cylinder, devised by Dr. W. J. Morton.

What Hammond says about the use of static electricity for anæsthesia of the glans penis is also worthy of notice. This is a condition which I have repeatedly observed in masturbators who have indulged rather freely in the practice. In this condition of blunted sensibility static electricity affords, according to Hammond, greater success than the other forms.

For this purpose he uses an electrode also devised by Dr. Morton, which is so constructed that while the sponge electrode is upon the body the sparks can be made to pass from one brass ball to another, which can be separated or brought closer together at will. If, for example, the dry sponge electrode is placed on the organ, and the metal globes are separated about half an inch from each other, a powerful effect is produced on the glans penis. Hammond states that by means of this variety of electricity sensibility has been restored in the glans and neighboring parts, after the galvanic as well as the faradic current had been unsuccessfully employed.

Franklinization, which, according to this view, offers very favorable possibilities, cannot, however, be used very often because few physicians possess a Franklin machine. I also believe that the other two kinds, the galvanic and the Faradic, which are at the disposal of almost all physicians, are sufficient. All in all, we possess in electricity, as we have seen, an effectual means for the treatment of sexual impotence.

We now come to consider the so-called "local applications" which are customarily employed. They consist essentially of two kinds of applications, the introduction of heavy metal sounds, and the cauterization of the pars prostatica urethræ.

The treatment with sounds consists in the introduction of a metal bougie into the urethra every three or four days, the sound being allowed to remain in position for some time. I begin with about No. 18 Charriere and increase until No. 26, 28, or even 30 or greater. The object of this treatment is to reduce the sensibility of the urethra. By permitting it to remain longer, from ¼ to ½ an hour, the occurrence of an erectio penis is often observed.

If I have this latter purpose, directed more to influencing the mind in view, I use with advantage the chan-

neled sounds formerly devised by me for the treatment of old chronic gonnorhœas.[46] This is smeared with a 1-1½ silver nitrate-lanolin, or iodine-lanolin ointment and introduced into the bladder. In this case it is especially the influence of the stimulating medicament in the pars prostatica which after a short time produces an erection.

The psychrophor, devised by Winternitz, can often be used for this purpose. It consists of a metallic catheter of double current, the vesicular portion of which is closed.

It is a two-way catheter, to the two tubes of which rubber tubing is attached. At the end of one of the tubes is an elevated vessel filled with cold water, the other tube is conducted into a receiver upon the floor. If the water is sucked out of the higher vessel—for which purpose it is better to attach a bulb to the afferent tube, or it can be done by the mouth or a syringe attached to the efferent tube—an uninterrupted stream of cold water flows through the catheter resting in the urethra. Cold combined with metallic pressure should favorably affect the urethra and the sexual apparatus emptying therein.

If it is desired to bring about an erection, water warmed to about 40°Centigrade is more effectual. The general practitioner can dispense with this apparatus, for its effect is in no way different from that of the bougies.

Cauterization of the pars prostatica urethræ may be accomplished in different ways.

A very convenient method is by means of Guyon's syringe. This consists of a syringe to which a bulbed, hollow rubber bougie is attached. The syringe is filled with a 1-10% solution of silver nitrate which is drawn through the hollow bougie by turning the stopper; each revolution corresponds to one drop emptied at the bulbar end. When the instrument is prepared the oiled bougie is introduced into the urethra; at a depth of about 14 cm. the head is distinctly felt to strike the bulbus. With light pressure it is now pushed about 2 cm. further, the yielding of the resistance of the bulb being distinctly perceived. When the pars membranacea has been passed, which can be determined by palpation in the rectum, the piston of the syringe is turned, thus expressing a drop of the silver nitrate solution. The bougie is now pushed 0.5 cm further and the piston again turned. In this way the entire pars prostatica is cauterized as far as the sphincter vesicæ internus.

This method is not so painful as that with Ultzmann's urethral dropper, a small syringe joined to a capillary metal catheter, the capillary opening being forwards. The instrument is introduced after, as in the previously described instrument, the solution has been brought to the point of the catheter; it is controlled by the finger in the rectum; when the point is exactly in the pars prostatica the solution is discharged into the urethra by means of pressure on the piston.

The cauterization can also be accomplished by means of silver nitrate rods. These are prepared from cacao-butter and deposited at the desired spot by a pistol-like instrument.

The safest method is by means of the endoscope. The tube is introduced as far as the pars prostatica into the colliculis seminalis. A solution, or silver nitrate in substance is now brought to the desired point. In this way the cauterization is better localized; only that which was intended is touched.

Methods for cauterizing the urethra are not lacking as we have seen. However, in my opinion, there are, all told, few occasions for the use of this means. I consider it to be indicated and permissible, only when endoscopically an inflammation of the colliculis seminalis or its neighboring parts, or an inflammatory congestion of the prostatic portion of the urethra, has been demonstrated. In the hypersensibility of the urethra, constantly being urged, it is a ticklish matter. Almost every urethra is sensitive when instruments are introduced. It is at least very difficult to determine what degree of sensitiveness is the normal one, especially since the expression of pain uttered by different patients suffering from equally painful impressions are not in the least always the same. Simple hypersensibility of the urethra will be sufficiently diminished by simple sounding; only in exceedingly marked instances of this sort would I consider a cauterization with a weak solution of silver nitrate to be at all permissible.

If we should now turn to the internal medication employed in impotence, we should have to introduce a great many medicaments having a reputation for curing impotence. The reader, however, will not be curious to know all that has been used or recommended. I shall note only facts which are certain, and have been studied by capable observers.

Of the many remedies known as aphrodisiacs, I shall mention only cantharides, phosphorus, atropine, strychnine, and ergotin. The questionable effect of these last two has been, indeed, often asserted; still the reports are too few in number, and too inexact for anything certain to be deduced from them. To the first three drugs, on the contrary, a distinctly irritating effect upon the genitals must be ascribed. The best known is cantharides, of which 3–8 drops as the tinct. cantharides may be ordered three times a day. They cause an increased access of blood to the genito-urinary system, which reveals itself in repeated erections and marked inclination to coition or masturbation. We must not forget, however, that these symptoms may develop into severe inflammation. Many cases of strangury, cystis and nephritis caused by cantharides have been reported.

The undeniably stimulating effect of phosphorus upon the genital tract is sought to be explained. It is more probable, however, that phosphorus develops its influence in its character of general tonic and stimulant of the nervous system. The preparations used are phosphorus in doses up to 0.003 grammes per day, zinci phosphidum to 0.025 grammes per day, and acid hypo-

phosphori dilut. in doses of 20 drops three times daily, to be taken in water. The dilute phosphoric acid has less phosphorus effect, and is therefore not to be recommended. Hammond likes to combine strychnine with phosphorus. He prescribes 100 pills from

Zinci phosphidi, - - -	0.6
Ext. nuc. vomic, - - -	2.00

of which one is to be taken three times per day, or he orders

Strychnini sulphat, - - -	0.2
Acidi hypophosphor. dil., - -	120.0

Of this mixture 10 drops at first are to be taken in water three times a day, and the dose is to be increased to 25 drops.

Atropine has a similar effect. It causes a distension of the vessels of the genitalia, and, according to Gross[47], a diminution in the trabeculæ of the erectile bodies, in consequence of which an increased access of blood to the penis results.

Gross also saw the good effect of the remedy in the diminution in the number, or the total cessation, of the pollutions or prostatic discharges often complicating the case. The latter effect I have not been able to confirm, but I must agree that atropine exerts a stimulating effect upon the genitalia, which reveals itself in more frequent erections of longer duration.

I order pills of atropini sulphat, $\frac{1}{4}$–$\frac{1}{2}$ milligramme of which 2–3 are to be taken daily. As soon as annoying ocular symptoms appear the remedy is discontinued.

When, now, do we have the indication to use one of the remedies named? To prescribe one of these indifferently in every case of impotence cannot justify the term "rational therapy." In most cases, indeed, there is a certain time during which these means are contraindicated. No one would attempt to use them in impotentia e defectu; in the impotentia nervosa irritativa it is the duty of the physician to reduce the irritability of the nervous system, and especially of the genital organs. Impotentia organica sive paralytica demands as the first condition of improvement a long period of rest in order that the organs may be strengthened. In psychical impotence also, in which a passing weakness is often present, it is well to give the sexual organs rest and opportunity for a reaccumulation of nervous tension. During this period a general strengthening and tonic treatment is to be recommended. This consists, as I have already described, of hygienic-dietetic measures to which internal roborants, such as iron and quinine may be added. When the general constitution has been built up and the tone of the general nervous system improved, then phosphorus, atropine, and eventually cantharides, as described, may be used as accessory remedies.

The indications for oxygen inhalation introduced by Gyurkovechky[48] concerning which I desire to make a few final remarks, are the same. Gyurkovechky has the patient inhale at each sitting 10 liters of pure oxygen, which he prepares from potassium chlorate and manganese dioxide by means of Limousin's apparatus. Without being able to explain the manner in which these inhalations act, Gyurkovechky recommends them highly; he ascribes to them an aphrodisiac effect; it is said to be permanent, and since, while these inhalations are being taken there is an increase in physical power and enjoyment, in this way circumstances favorable for sexual power are brought about. I have not yet had opportunity to try this therapeutic means, but do not think I am justified in not mentionining it here, since it springs from so careful an observer.*

[41]Wiener Med. Wochenschr. 34, 61.

[42]Oesterr. Zeitschr. f. prakt. Heilkunde und Electrotherapie, 1864, x. Bd. 3, u. 4, Heft, S. 446 ff.

[43]Die allgemeine Elektrization des Mensehlichin Korpers, Halle, 1883, p. 46 ff.

[44]Etudes sur l'electricite, Paris.

[45]Op. citat.

[46]Berliner klin. Wochenschr, 49, 85.

[47]Gross, on Impotence, Edinburgh, 1887, p. 50.

[48]Op. citat., p. 173 ff.

[49]Linonsin, Contributions a la Pharmacie et la Therapeutique, Paris, 1878, 79, p. 25,

*A more exact treatise on this subject, and also a treatise on sterilitas virilis by the same author will soon appear from the press of J. A. Finsterlin in Berlin.—*Deutsche Medizinal Zeitung.*

REPORT ON PROGRESS.

OTOLOGY.

BY J. B. SHAPLEIGH, A.B., M.D., ST. LOUIS.

Boxing the Ears and Its Results.

The following from the *Kansas City Med. Record* of April, although containing nothing new, indicates that a very common evil is attracting the attention of medical men, and points out the possible result of thoughtlessly boxing a child's ears. Parents and teachers should be informed of the danger of this method of punishment, and that nature has provided for such applications a much more suitable region, where there is no danger of injuring important structures.

"We would fain hope that, in deference to repeated warnings from various quarters, the injurious practice of boxing the ears, once common in schools, is fast and surely becoming obsolete. It is too much to say that this desirable end has yet been realized. Certainly the recent observations of Mr. W. H. R. Stewart do not give color to this view. In a pamphlet on 'Boxing the Ears and Its Results,' lately published, and illustrated by appropriate cases, he briefly summarizes his own experience in the matter. He reminds us that notwithstanding the toughness of the aural drumhead, its tense expanse will rupture only too readily under the sudden impact of air driven inward along the meatus, as it is in the act of cuffing; and he shows that in one instance at least this injury resulted from a very slight though sudden blow. Given early and skilled attention the

wound may heal very kindly; but if the beginning of mischief be overlooked, as it often has been, further signs of inflammation soon follow, and a deaf and suppurating tympanum is the usual result. There is practical wisdom in the statement that this consequence most readily follows in the case of the poorly developed and underfed children who abound in boarding-schools. In them an earache would probably receive no very strict attention, and disease might for a time work havoc unimpeded. When chronic suppuration exists already, and it is only too common, a random knock on the ear may result, as in a case related in the *Lancet*, in a fresh otitis, with fatal brain complications. School masters and others, who may at times be tempted to apply the correcting hand somewhat too carelessly might read the few pages of this little work with equal interest and advantage. The close connection between ear and brain should never be forgotten, and the reflection that injury to the former organ most easily terminates in total deafness, and in suppuration, which may any day take a fatal course, should assist in the preservation of a sometimes difficult patience.—*Lancet.*"

Complete Closure of Both Auditory Canals by Bone.

In Daniel's *Texas Med. Jour.*, Dr. J. W. Carhart reports a case of this kind, which is very similar to the one presented at the last meeting of the American Otological Society by Dr. Holt, of Portland, Me., and which was noticed in this column. Dr. Carhart's report is as follows:

"In the fall of 1884 I was summoned to treat the wife of Rev. J. G., who was suffering from earache. It was night, and a careful examination of the ear was not made. A few drops of a 4% solution of hydrochlorate of cocaine was turned into the ear and a small bag of hop poultice was ordered applied for the balance of the night.

The following day Mr. G. brought his lady to my office, when, on examination, I found the external auditory canal closed. Thinking that adhesion had taken place as the result of inflammatory processes, a silver probe was carefully used, when, to my surprise, I encountered what was evidently true skin covering a bony plate. I then examined the other ear and found that closed in precisely the same manner. I had been acquainted with the lady for some time, but had never heard any complaint of defective hearing, and had never noticed but that her hearing was perfect.

On a test I found that she could hear the watch tick at a distance of five feet. The hearing was not improved by listening with the mouth open, nor was she in the habit of so listening to preaching or in private conversation. She could hear well with her back to the speaker. Her husband had never noticed the peculiarity about her ears, or any defect in her hearing. She had herself never noticed that her ears were not like other people's, and she is satisfied that the condition is congenital. Her family had never spoken to her about it, neither had her family physician, in Illinois, who had treated her from a child. She had never noticed any discharge from the ears but when she took cold she generally suffered from ear-ache.

I have known the lady, intimately, ever since, and the same condition of things remains with no perceptible change in her hearing powers.

The only theory that, to me, explains her ability to hear, is, that probably the thin bony plate acts as the diaphragm in the mouth-piece of the telephone, which vibrates under the impaction of sound-waves, which vibrations are communicated to the mechanism within, giving the sensation of sound.

The Phonograph as an Acoumeter.

The want of a perfect test for the hearing has long been recognized. Those in common use, the watch and the voice, are objectionable as regards their universal application. The fractional form of recording the result of the watch test in which the denominator indicates the normal hearing distance for that particular watch, and the numerator the distance at which it is actually heard is the most generally used and the most satisfactory one yet devised. The objections to either test are well known to all specialists, and need not be enlarged upon here.

In view of this condition of things many attempts have been made to supply a more perfect test, but so far with no great measure of success. Attention has, naturally enough, been directed to the phonograph as offering the means of producing the end desired, and Dr. C. W. Stimson, in the *Med. Record* for May 3, 1890, thus describes his attempts to solve the problem.

"By experiment it was found that a certain sound, when produced at a certain distance and recorded on the phonograph cylinder, if reproduced could be just heard by the average untrained ear. This was taken as a unit, and the other sounds were made to vary from it in intensity by one-, two-, or three-twentieths, according to the number of the stroke. The method of procedure was this: On a quiet day I took my instrument out of doors where the surroundings fulfilled as near as possible the conditions required by the law of inverse squares. A sound was produced at a distance that could just be appreciated when rendered by the phonograph. That distance was divided into twenty parts according to the above law. The sound was then produced at each of these divisions. We thus had a scale of sound, the strokes of which differed from one another by one-twentieth of the intensity of the first. I then, by experiment, found how much the force would have to be increased to make the intensity of the sound when produced at twenty feet, for instance, equal to the intensity when produced at 4.48 feet. It then followed that if both were produced at the same difference, but with the corresponding difference in force, they would still bear the same relationship. This was repeated for each

distance until the force for each intensity was determined."

The author used as the sound producing instrument an ordinary hand bell, whose fundamental note was F natural. A fifty-gramme spherical weight falling from a height of 20 ctm. and striking the bell at a point 1 ctm. from its edge produced the loudest note of the scale. The fall was diminished 1 ctm. for each stroke, all being produced at a distance of ten feet from the machine.

After a description, somewhat complicated, of the arrangement of the instrument for use, the method of procedure is thus described:

"A patient is informed that when the tubes are in his ears he will hear a bell strike. He is requested to count aloud the number of strokes. After placing him in position the operator notices in which direction the stopcock is turned and starts the machine. With a second pair of tubes one is able to know if the counting is done at the proper moment. If it is the right ear and twenty strokes are counted we can express the acuteness of its hearing by R. $^{20}/_{20}$. If the left ear and only ten strokes are named we write $^{10}/_{20}$. This, of course, can be repeated at will." The author claims to have arranged a standard scale of sounds, regularly varying in intensity, and excluding practically all extraneous sounds. Granting this, the value af the instrument must depend upon its general adoption, and it is open to the objection of producing only a single note.

It is frequently found in practice that certain sounds are better heard than others; for instance, patients may fail to hear the watch, or hear it at a very short distance, while they hear conversation fairly well, or vice versa. In other words, there may be a comparative inability to hear a sound of the pitch of the watch-tick, while sounds of different pitch and character may be more easily appreciated. The tests do not always agree. Hence the need for a test not only varying in intensity but also in pitch; and hence also the difficulty in securing anything like a perfect acoumeter.

Pilocarpine for Deafness.

In regard to the treatment of deafness by subcutaneous injection of pilocarpine, Dr. Geo. P. Field (*Brit. Med. Jour.*, May 17, 1890) states the following. He has found the greatest benefit from this treatment in those cases where bone conduction was entirely or almost entirely lost, and when disease of the labyrinth was the prime cause of deafness. Benefit has occasionally resulted, however, in cases of middle ear deafness, but to a much less extent. He considers labyrinthian disease as commonly secondary to middle ear affections and as inflammatory in nature. He says:

"The early stages of this affection as it attacks the labyrinth are evidenced anatomically by congestion, small cell infiltration and sometimes by suppuration and complete destruction of its membrane. The inflammation may spread along the sheath of the auditory nerve and so reach the cranial cavity, but more commonly and fortunately the inflammatory process is limited to the labyrinth itself. Here at times the inflammatory material undergoes further changes. The cavity of the labyrinth becomes filled with a fatty or cheesy mass, containing granular and sometimes calcareous matter, pigments and crystals of cholesterine; bands of fibrous tissue may stretch from wall to wall, and the bony walls become thickened as the result of the inflammation of their periosteum. The membrane of the labyrinth may be absolutely destroyed, and with it the nerve endings spread upon it are degenerated and atrophied. More commonly the membrane is thickened by overgrowth of fibrous tissue, and this presses on the nerve endings and paralyzes their action. The accumulation of these inflammatory products in so confined a space necessarily causes more or less disappearance of the perilymph and endolymph. The course of the inflammation, it appears then, is that which an inflammation may pursue in other parts, its results being dependent upon its severity and upon the delicacy and complexity of the organ in which it has occurred. Nor would it appear that the cause of the inflammation has much influence upon its pathological results. Syphilitic affections of the labyrinth, in which Politzer first found the pilocarpine treatment of benefit, cause practically the same pathological appearances, although it may be mentioned that Moos and Steinbrugge have described a case in which a true gumma had formed in the periosteum of the labyrinth."

As to the action of the remedy he believes that it increases the secretions of the inner ear, as it does of the ceruminous glands and the mucous membranes generally, and by this increased secretion softens and promotes the absorption of inflammatory accumulation, thus relieving the pressure on the auditory filaments. In case of entire destruction of the lining membrane of the labyrinth no secretion could occur, and no relief would follow. No benefit could be looked for in cases where bony hypertrophy of the labyrinth or pronounced atrophy of the auditory nerve had occurred. As we can form no definite conclusions as to the presence of such conditions there must always be a doubtful prognosis as to this method of treatment, but in many cases the author claims to have made practical cures.

Function of the Semi-Circular Canals.

The experiments of Flourens on pigeons and the pathological researches of Meniere have been accepted as showing that the maintenance of equilibrium was due to labyrinthian impressions, and that destruction of, or injury to, the semi-circular canals resulted in loss or impairment of co ordination. Schiff objected to this on the ground that section of the auditory nerve trunk failed to produce these disturbances. Bottcher claims that in pigeons the muscular irregularity is due not to the destruction of the canals but to the coincident injury to the cerebellum, which, for anatomical reasons, it is impossible to avoid.

Prof. Steiner, of Cologne, has experimented on

sharks caught in the Bay of Naples and in whom the difficulties of the operation are very slight, the skeleton being cartilaginous, and the semi-circular canals very superficial and well developed. Injury to the brain can, therefore, be easily prevented, and his results show that no disturbance of muscular co-ordination follows excision of the canals, but that if the trunk of the auditory nerve be stretched or even slightly pulled upon, the disturbance appears. He has obtained similar results in frogs and lizards. Hence he concludes that the origin of the loss of co-ordination is not to be found in the canals themselves, but to injury to, or irritation of, the orign of the auditory nerve in the medulla oblongata. As some of the fibers of the auditory nerve may be traced to the cerebellum, this may also be a source of disturbance, as other injuries of this part of the brain result in forced movements. It follows from these experiments that in cases of so-called Meniere's vertigo it is not necessary to suppose the symptoms due to trouble in the canals solely, and two cases (one reported by Politzer of congenital absence of the canals, and the other, by Lucas, of their occlusion by blood-clots), neither of them presenting symptoms of disturbed equilibration, shows that even in the absence of the canals or their destruction,co-ordination may be unaffected.—*Cin. Lancet-Clinic.*

The generally accepted theory of the functions of these canals needs further investigation before being unconditionally received, and later research seems to be accumulating strong arguments against it.

Massage in Catarrh of the Middle Ear.

In an article on the above in the *Brit. Med. Jour.* for May 24, 1890, Dr. Adolf Bronner speaks in favor of using passive motion of the membrana tympani and ossicles in cases of chronic middle ear catarrh of the dry or adhesive form.

Lucas, of Berlin, recommended the method of alternately compressing and rarefying the air in the external meatus. He abandoned the practice because it gave rise to hyperæmia and inflammation, as he thought.

Hommel (A. F. Ohrentire) advances the method of "tragus press," that is pushing the tragus into the meatus at a rate of 120 times a minute for a minute or two several times daily. This is not a satisfactory way.

In 1884 Lucas introduced his pressure probe, but this method is apt to be painful, and has not been generally useful.

Dr. Douglas Graham, in the *Boston Med. and Surg. Jour.* for April 3, 1890, proposes to produce the same result by placing the hand over the patient's ear with the muscles in front of the metacarpal bone of the thumb fitting well over the auricle, and then to make moderately strong pressure in a direction backward, upward and outward. This method is on the principle of the "sucker" and is rather pleasant. In my experience it leaves a sensation of clearness and lightness in the ears which is quite decided.

In general, however, I resort to a simple Seigle's speculum fitting well into the meatus, and introduced with the rubber ball half compressed. Then by further compression the air may be condensed and by allowing the ball to expand rarefaction is produced. The movements of the drumhead may be watched during the time. This should be done after the tympanum has been inflated as well as possible by Politzer's method, or the catheter, and I believe it to be a valuable adjunct to the usual treatment in this obstinate trouble.

Otitis Diabetica.

Professor Kuhn, of Strassburg, delivered a lecture on the diseases of the ear in diabetes in the Section of Otology connected with the Naturalists' and Physicians' Association at Heidelberg, Sept. 19, 1889. The clinical symptoms given by many of the writers on this subject are as follows: A violent otitis media acuta, with profuse suppuration, often accompanied with hæmorrhage from the ear, and the onset of mastoid inflammation. Very often the surgeon is confronted by a true osteitis of the petrous bone, all parts of it being liable to the attack. Kuhn suggests for this process in those affected with diabetes the name of "otitis diabetica." In some instances the mastoid has been opened with success; in others the operation has not prevented the brain from being attacked, and the fatal termination of the disease. He then gives an account of two cases of the disease, in one of which all rational treatment was refused and death resulted from purulent meningitis, while the other recovered from the aural affection after both mastoids had been exposed by incision but not opened.—*Am. Jour. Med. Sci.*, April, 1890.

Fibroma Auriculæ.

Dr. Wilhelm Anton, of Prague, has observed and recorded the rare occurrence of a soft fibroma in the auricle. The growth of connective tissue tumors in the lobule, however, is a common occurrence (*Archiv. f. Ohrenheilkunde*, bd. xxviii, October, 1889). The tumor was found in the ear of a man, æt. 40 years. His statement was that the new growth had developed in his ear within four months of the time he presented himself to Dr. Anton. His ear was said to have not been previously diseased in any way. There had never been any pain in the tumor, but it had bled when touched. Examination of the left ear revealed the presence in it of a tumor the size of a walnut, with ulcerated surface nearly filling the concha and the external auditory canal. Its color was reddish and its consistence soft. It was attached by a pedicle and not a broad base. The tumor was removed by burning through the pedicle with the galvano-cautery in form of a loop.

The pedicle, four millimeters wide, was attached between the spina helicis and the under limb of the crura furcata. The microscope revealed the tumor to be con-

nective tissue new growth with alveolar stucture and changes of an inflammatory nature in the connective tissue.—*Am. Jour. Med. Sci.*, May, 1890.

Two Otological Mistakes.

Dr. S. Szenes calls attention to two mistakes in the treatment of the ear often made by unskilful physicians —viz.: instrumental extraction of foreign bodies from the ear, and indiscrete syringing of the ear, as well as the indiscriminate use of drops in the external ear in cases of catarrh of the middle ear.—*Am. Jour. Med. Sci.*, May, 1890.

Trephining the Mastoid.

The *Brit. Med. Jour.* for March 29, 1890, contains an article on the above subject by Dr. W. Arbuthnot Lane, in which he advocates opening the antrum in cases of chronic discharge from the ear with tenderness over the mastoid, even if there is no evidence that inflammation of the cells be present. He thinks that often the seat of the trouble is in the antrum mastoideum, and that a complete drainage of this can only be obtained by an external opening. He employs a gouge in operating and while he follows the indications of most of the authorities he seems to pay particular importance to establishing a free communication between the antrum and the middle ear cavity.

While this ensures perfect cleanliness the opening of the antrum has been generally regarded as sufficient, and this cavity has been considered to be the objective point of the operation.

Age of Fœtus.—A woman was delivered recently at the Maternity of a dead fœtus, which is now presented to you. You observe that it is macerated; and there fore had been dead some days. An interesting question relating to the fœtus expelled dead or living is: Can we determine, at least approximately, how far development had advanced, or, in other words, what was the age of the fœtus? The following table from Auvard I believe will be useful to you in deciding this question:

About the middle of the fourth month the fœtus is 20 centimeters long.

About the middle of the fifth month the fœtus is 25 centimeters long.

About the middle of the sixth month the fœtus is 30 centimeters long.

About the middle of the seventh month the fœtus is 35 centimeters long.

About the middle of the eighth month the fœtus is 40 centimeters long.

About the middle of the ninth month the fœtus is 45 centimeters long.

And at the end of the nine months, 50 centimeters long.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., Editor. W. C. MARDORF, M.D., Associate Editor.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, JULY 5, 1890.

Solol in Genito-Urinary Practice.

Much has been promised for solol as an antiseptic, and it is gratifying to note that this promise has been partially fulfilled, and that too, in a class of cases in which it is sure to be appreciated. Urethral fever is a disease which may come on in the most unexpected manner, and apparently in spite of all precautions that may have been taken; it is a source of great anxiety to the surgeon, who has found how futile the best selected treatment often proves to be. Dr. J. G. Mumford. of Boston, reports[1] a group of nine consecutive cases of diseases of the genito-urinary system occurring at the Massachusetts General Hospital, in which salol was used with such results as to make them worthy of further publication. There were three cases of stone with cystitis, in old subjects, in two of which the operation of sounding was followed by rigors and fever. In the third case there were no untoward symptoms. Salol was employed, with excellent results, the stones were crushed and washed out, and no rise of temperature of or other unfavorable symptoms occurred, although no especial precautions were taken during the operation. Another case was that of a nine months' persistent gonorrhœa; rest, dieting, and various local applications for three weeks were without effect, but under the use of salol the discharge ceased in three days. A somewhat similar case was that of an old gonorrhœal subject with stricture of large caliber in the anterior urethra. The discharge was relieved in ten days. A case of stricture with gleet was also treated, in which instrumentation was followed by fever. He was put on salol and afterwards underwent a course of gradual dilatation without

[1]Boston Med. and Surg. Jour.

any symptoms. A more serious case was one of impermeable stricture with perinal fistula, in which ineffectual efforts were made for half an hour to enter the bladder, the patient being etherized. On the following day the temperature ran high, a previously existing cystitis became greatly aggravated, and three days later pyelo-nephritis was found to be present. The patient was delirious. The usual treatment being employed for two weeks without avail, the patient was put on salol, and two weeks afterwards he was free of all bladder or renal trouble; the opening of a para-urethral abscess relieved his stricture, and he was able to pass water without difficulty. The two other cases were those of stricture of long standing in which the general condition was poor. In one of these cystitis was present, and in the other there was much inflammatory swelling about the penis from previous rough handling. Salol was used as a prophylactic, and the strictures divulsed; convalescence was uninterrupted.

These results are encouraging, and warrant a wider use of salol than it has heretofore received. The drug was given by the mouth, in doses of from two to ten grains three times daily.

The St. Louis Medical Society's Proceedings.

We understand that by a resolution adopted at the last meeting, the publication of its proceedings now costs the society $20 a month in addition to the $20 a month for stenographic work, this bonus being granted in consideration of the plea of the publisher that it would cost him that much to publish them consecutively, etc. We do not remember of any such plea being put forth at the first of the year, when such glowing inducements were offered by the same publisher for the privilege of obtaining them. At that time, too, it will be remembered that the opportunity was offered the society of having its transactions published in an established journal—one *possessed of a circulation*—a weekly, which alone could be capable of publishing them in their entirety, and without other cost to the society than that of the stenographer's fees.

While not decrying this charitable disposition to nourish infant industries, let us hope at least that we will not be called upon to furnish postage to circulate the transactions amongst our professional brethren.

We also learn that active legislation has been rife to curb the natural but disloyal desire manifested by some of the members to present their papers in a medium which, without the expense of sending out reprints, would reach beyond the circle that formed the auditors at the time of their reading.

This also has been successfully accomplished, and so the Committee on Nutrition goes merrily on its fostering mission. If the infant doesn't survive—and even flourish at least in a mild sort of way—it's because the society doesn't want to read its own transactions!

The Obstetrical Binder.

Whether the binder should or should not be used in obstetrical practice is a question which seems to be agitating certain parts of the medical world just at present. This is a matter about which not much can be said for or against, and it must be settled by every physician for himself. We do not think that the binder deserves the terrific onslaught which it recently received at the hands of the *Medical Record*, which condensed its attack into the following short, sledge-hammer blows: "The alleged comfort secured is imaginary, the idea that the binder can restore the figure is unscientific and unphysiological, its supposed power in helping involution is purely hypothetical, and the whole conception of a binder is unnatural and abhorrent to common sense. * * The physician who binds nowadays does it out of a weak complaisance to an imperious mother-in-law or officious nurse." We do not think that the comfort secured by a binder is in the least imaginary, it is on the contrary very real, as may be readily seen by referring to the most interested party, the patient. We also believe that it has in certain cases a tendency to prevent syncope, where the sudden fall of pressure in the abdominal blood vessels may tend to bring this about. Further than this, there is not much to be said in its favor, but what more can be asked? The physician should always be willing to do anything that will tend to increase the comfort of his patient, especially during the disagreeable trials of the lying-in period, even at the expense of a little "bother" on his part. The idea that the use of the binder is positively harmful, as has been stated by some, is without foundation; no facts have been brought forward in favor of this statement.

The Treatment of Obstinate Dropsy.

There are certain cases of dropsy, occurring most usually in the course of incurable renal disease, that most stubbornly resist treatment. Dr. Tyson suggests a few points in the management of such cases which should be of some value.[1] He reports three cases of chronic kidney disease in which his method of treatment brought about much better results than would have followed ordinary methods. All had been treated with the usual purgatives and diuretics without effect; in fact the cases grew worse. Milk was administered at regular intervals and in fixed doses, and this was followed by much improvement. In two of the cases spartein in full doses, in addition, was followed by a large increase in the amount of urine excreted. Though sugar of milk is a diuretic, the substitution of milk for all food was followed by improvement, but not in diuresis; when this improvement flagged, the use of the diuretics, as sparteine and caffeine, was begun and continued with the happiest results.

[1]Medical News.

Dr. Tyson believed the explanation is to be found in the fact that there is really but a very small amount of solid and liquid food ingested. For the first day but four ounces was permitted every two hours from 6 A.M. to 8 P.M., making thirty-two ounces in twenty-four hours, all other solids and liquids being cut off; but sixteen ounces additional were allowed in the second twenty-four hours. Even if the amount of urine is not increased the excretory organs keep up their work and gradually diminish the amount of fluid present in the tissues.

This plan is similar to Hay's treatment, in which the allowance of a minimum of water is combined with the use of hydragogue cathartics, but is an improvement upon it, in that the food is given in a much more manageable form. The milk may be given either skimmed, in which state it is more easily assimilable, or as buttermilk, or it may be peptonized.

This treatment may be supposed to exercise a direct curative effect upon the kidneys; the excessive accumulations of fluid cause engorgement of the general circulation, as well as that of the kidney, thus interfering with the activity of the latter. When the amount of fluid ingesta is restricted, the balance begins to be restored, and the kidneys can resume their former activity. In such cases of dropsy the administration of diluents would only make matters worse, and result in a further accumulation of fluid. From this it may be seen that the cases for this treatment are not those of acute and subacute nephritis, where the kidneys are yet comparatively efficient, but rather those in which there is a complete saturation of all the tissues, including the kidney itself, with transuded serum, and where there is no movement in the lymph spaces or lymph vessels.

MEDICAL ITEMS.

MONUMENTS were recently raised in Vienna to Profs. John and Theodore Oppolzer, father and son.

THE METRIC SYSTEM is said to be legally recognized at present by over 60% of the civilized nations of the world.

CARDINAL LAVIGERIE is having negroes trained as medical practitioners at Malta, and several have already completed their education and proceeded to Central Africa.

HEADACHES OF CHILDREN.—Charles L. Dana says the headaches of children can be best controlled by small doses of iodide of iron or the citrate of iron and quinine.—*An. of Gyn.*

WOOLEN CLOTHING IN PHTHISIS.—Dr. Grechko has examined the effects of supplying phthisical patients with woolen clothing. He finds (St. Petersburg Dissertations, 1888-89, No. 44) that the loss by the lungs and the skin is greatly increased only during the first twenty-four hours; the temperature of the skin is distinctly increased during the first day, but after that it begins to fall slowly, so that by the end of the week it has become normal. The internal temperature and the blood pressure do not undergo any change.—*Lancet.*

INVENTION OF THE MICROSCOPE.—The third centenary of the invention of the microscope will be celebrated this year at Antwerp, where a historical exhibition of microscopes will be held.

THE SALICYLATES AND URIC ACID.—As a means of increasing the excretion of uric acid, salicylate of soda has thirteen times the power of salicine, while salol occupies an intermediate place.

DR. WARBURG, the inventor of the "tincture" of antimalarial renown, is said to have reached the age of 86 years, and to be in great pecuniary distress. An appeal on his behalf has been published in England.

CHLORALAMID HYPODERMICALLY.—Schmidt employs chloralamid hypodermically, the solution used being thirteen grains of chloralamid dissolved in five drachms of distilled water. Sixteen minims of this subcutaneously is usually a sufficient dose, and acts more rapidly than larger doses given by the mouth.—*Med. News.*

DR. J. B. JOHNSON.—A few weeks ago we reported as a news item that Dr. J. B. Johnson had resigned his professorship in the St. Louis Medical College. Since then, though the information was based on what was supposed to be reliable authority, we have ascertained that it was a mistake. Hence we gladly make the correction.

DR. SENN HONORED.—Prof. N. Senn, of Rush Medical College, has been invited by Prof. von Bergmann to read a paper upon the diagnosis and treatment of wounds of the intestines before the surgical section of the International Medical Congress at Berlin. It will doubtless be one of the most interesting essays presented to the body.—*Med. Index.*

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.—The seventeenth annual meeting of the Mississippi Valley Medical Association will be held at Louisville, Ky., Oct. 8, 9 and 10, 1890. The meeting promises to be of great social and scientific interest, as the profession of Louisville are using every endeavor to make it a success. Ladies accompanying physicians will be made especially welcome. Gentlemen desiring to read papers will please send titles of the same at an early date to the secretary, Dr. E. S. McKee, Cincinnati.

A POPULAR BELIEF IN THE CONTAGIOUSNESS OF PHTHISIS.—In a paper on the contagiousness of pulmonary phthisis, read at the twenty-fifth anniversary meet-

ing of the Caucasian Medical Society, Dr. Babayeff mentioned the curious fact that among the Georgians the name for consumption is "chlekki," meaning "the contagious disease." When one of their number is found to be suffering from this disease, he is at once isolated, and is taken to a hut or tent at some distance from the village. The care of these patients is entrusted to an old woman, who carries to them the necessary food and drink; and they are never allowed to associate with the well.—*Med. Rec.*

Medical Journal Circulation.—According to Geo. P. Rowell & Co.'s Newspaper Directory, the circulation of the weekly medical journals of this country is as follows: New York Medical Record, 12,500; N. Y. Medical Journal, 5,000; St. Louis Medical Review, 4,000; Journal of the American Medical Association, 5,000; Boston Medical and Surgical Journal, 2,000; Maryland Medical Journal, 1,500; Cincinnati Lancet-Clinic, 4,000; Philadelphia Medical News, 4,000; Philadelphia Times & Register, 2,000.

A Revolt at the Bicetre Asylum.—On May 26 the great Parisian asylum for the insane witnessed the strange sight of a rebellion of its inmates. The rebellion was begun by a maniacal patient bursting the bars of his cell and then releasing forty others. They attacked and drove back their guards, and then proceeded to ransack the quarters of the keepers, after which they kept up the fight quite fiercely until the guards got access to the water hose and turned it on them; this frightened and cowed the rebels so that they retreated, and were one by one returned to their cells.

Fœtus in Fœto.—Dr. Kotisko, of Vienna, has presented a preparation taken from an abdominal cystic swelling in an infant, æt. 5 weeks. The cyst was a retro-peritoneal one, which contained the skull, buccal cleft, with tongue and underjaw well formed, while the extremities could be distinctly traced. This formation of "fœtus in fœto" was presumed to be the formation of two embryos on the same site, where the one in its development embraced the other, and thus retarded or suspended the growth of the enveloped.—*Med. Press.*

Vaginal Injections of Corrosive Sublimate and Naphthol.—Dr. Rafael Weiss, writing in *El Progreso Medico*, a Cuban medical journal, mentions a form of poisoning by perchloride of mercury when frequently used, even in very weak solutions (1 to 5,000 or 6,000), after severe post-partum hæmorrhage, which requires the complete cessation of the mercurial salt. It is characterized by diarrhœa, causing exceedingly fœtid stools every few minutes, with severe colic and tenesmus, but without any stomatitis or albuminuria. According to the same writer, naphthol solutions when used as injections in obstetric practice not infrequently give rise to very severe smarting and burning pains, lasting for half an hour or so; and this unpleasant property has caused many practitioners to abandon the use of this substance for vaginal injections altogether. The inconvenience may, however, be entirely obviated by introducing iodoform in powder so as to cover the vaginal mucous membrane, and especially any lacerations that may exist, immediately after the naphthol injection."—*Lancet.*

Accidental Mercurial Poisoning.—A very curious case of accidental mercurial poisoning, resulting fatally, has just been reported. The victim was a lady suffering from phthisis, who, for the past year and a half has been using the Weigert hot air inhalation apparatus, and the poisoning was due to the breaking of the thermometer in the tube conducting the heated air from the cylinder to the mouth-piece. In consequence of the high temperature the mercury of the broken bulb became volatalized, and thus being inhaled caused acute inflammation of the respiratory tract and stomach.

Good for the Colleges!—The prospectus for 1890-91 of the Cincinnati College of Medicine and Surgery announces that after the season of 1890-91 four years of study, including three courses of lectures, will be necessary for graduation in this college.

The Eighth Annual Announcement of the Northwestern Medical College of Toledo, Ohio, session of 1890-91, publishes as a requirement for graduation that, beginning with the session of 1891-92, four years' study under the direction of a regular practitioner, and attendance upon three full courses of lectures will be necessary.

A Double Monster.—There is now on exhibition a double monster, known as the Tocci Brothers. The children are now æt. 13 years, and were born of an Italian woman living in humble circumstances. The body as far as the shoulders is single, but is double above. The stomach is common to the two children, and if one eats heartily the other has no desire for food, yet it is said that the two are very unlike in their appetites and tastes, one being fond of sweets, while the other cares only for substantials. The genital organs are male, but the face of one of the children is very feminine in its appearance.

The Cholera in Spain.—An outbreak of Asiatic cholera is reported from Puebla de Rugat, in Spain. The disease has existed there for some time, but its true nature has been recognized, or at least acknowledged, only within a few days past. Even yet the government at Madrid refuses to admit that the disease is true Asiatic cholera. Rugat is a small town in the eastern part of Spain, near Valencia, and physicians and medicines have been sent from the latter place to relieve the sufferers in Rugat. About one hundred cases of cholera have thus far been reported, and new ones are reported daily, despite the efforts of the local authorities to stamp out the disease.

PECULIARITIES IN DOCTORS' NAMES.—The *Kansas City Medical Index* has been scanning the new Physicians' Directory of the U. S., with the following startling result: One is Luckie, another is Shure, quite a number are Good; several are Noble, but one is Nott. There is an Ague in Pennsylvania, a region singularly free from malaria. Coffins are numerous (of course), but only two Tombs are to be found, with several Sextons. There is necessarily a Wall, because there is a McGinty; but, strange to say, there is no Sea, though there is a Seaton. One naturally expects to find Cattle, because there are a number of Steers. Some lady has had Tripletts, and two have had Pyles. Money is not to be ignored in the practice of medicine, hence an examination reveals the fact that there are only three that are really Poore, though one has a Shilling, and others Dollars, while some are running Newbills. Strange to say, there are only two Boozers in the whole medical profession, though there are only two who can always be said to be Sober, and one is always Beery. There is a Dr. Mass (whose first name is not Blue), a Pellet, a Seidlitz, and Tarwater. The physicians of this country are not without Cheek, although there are only two Hornblowers, and but few Swindles. There are many Slaughters, probably because of the Cutters and Butchers, and one Mangle may have had to do with it. There is one Newborn, one Shinn, a number of Bones, a Mussel, a Rash, a Pain, a Life, three Ills, a Diet, a Death, a number of Lances, Lights, Livers and Lungs, as well as Bowels, and one who is Nothing. There are Bitters, and Bloods, Kile, Kime, and DeKay, two only who are truly Able. Strangest of all, one can find but one School among the 90,000 doctors of the United States.

SOCIETY PROCEEDINGS.

ST. CLAIR COUNTY, (ILLS.), MEDICAL SOCIETY.

Regular meeting at Belleville, June 5, 1890. Dr. H. C. Fairbrother in the chair.

DR. JULIUS KOHL, Belleville, presented a paper (see p. 1) on

INCONTINENCE OF URINE.

DR. DAVID BOOTH, Belleville.—I agree with the author in his opposition to so-called "functional diseases." Thirty years ago when I was in College it was a favorite saying of old Dr. Linton that "there can be no functional disease without organic lesion," and I always acted upon that theory. It is an easy thing to say this or that is a nervous disease, or a functional disorder; indeed, much easier, often, than to patiently analyze the symptoms and continue physical explorations until you discover the organic lesion which is the cause of the altered nervous phenomena. My experience is that it is a very rare thing not to find some physical fault lying at the bottom of every one of these cases, that at first, and on the surface, might seem to be merely a nervous affection.

The case presented by Dr. Kohl well illustrated this point. This poor woman had suffered long and been treated much for "neuroses." With the star of hope in her horizon she had travelled patiently the route of the bromides and the batteries, but no help came to her. Now it is discovered that she has a structural lesion, well marked, and of life-long standing, that accounts for all her trouble. This lesion is remedied and all the symptoms which followed in its train are gone, and one more fact is given in support of the theory that "there is no functional disease without organic lesion."

NUMEROUS FISTULÆ.

DR. DEHAAN, East St. Louis.—I wish to refer briefly to a case from practice. Annie C., æt. 30 years, specific history, entered St. Mary's hospital, East St. Louis, May 20. Upon examination three fistulous openings were found near the anal orifice. The posterior one of these pursued a tortuous course, passed along the left inner border of the coccyx, and entered the rectum about three inches above, while the tracks leading from the anterior and middle openings proceeded along the posterior aspect of the vagina and entered the rectum opposite the opening of the one from the posterior. These were all cut through, and the pyogenic membranes along the tracks well scarified and scraped off with a curette. Healthy granulations have set up and the patient is doing well but I am not sure what will be the termination of this fearfully large cavity. Dr. Fairbrother saw the patient with me.

DR. RAYHILL.—I know of no treatment in such cases equal to the cutting operation. I have often tried caustic and various other injections but with unsatisfactory results. But I have never had anything else but recoveries from cutting, even though the track pursued a course for distant from the rectum, as in the case related. Caustic application to the track, after cutting, often hastens granulation. I have used the rubber cord in a few cases but have not been pleased with it.

DR. O. C. BATES, East St. Louis.—I must say that I am a friend to the rubber cord. I have recently used it in two cases, and with the best results. It does away with the fear of the knife and that is worth a great deal to some patients.

DR. BERKEBILE.—I recently had a patient who had spent some time in a St. Louis hospital for treatment for fistula. He was told that no other treatment but cutting would effect a cure. He finally became discouraged and came home. Upon examination I informed him that cutting through was the safest and speediest method. This he refused to allow and said that was the reason why he left the hospital—to escape the knife, which he had a perfect horror of. I then assured him that I could accomplish the same end by another means and he was greatly delighted with the news. I applied the rubber cord in the usual way, it did its work well, and the recovery was complete.

MENSTRUUM FOR COCAINE.

DR. C. F. WILHELMJ, East St. Louis.—I wish to cite

a case illustrating the different effects of cocaine when used with different materials for application. A lady was suffering the most excruciating pain from hæmorrhoids. I prescribed cocaine with lanoline, one dram to the ounce. She applied it but experienced no relief whatever. Repeated trials were made with the same result. I then changed the prescription giving, a 5% solution. Upon the first application of this immediate and permanent relief was given.

Dr. Kohl.—It is true, not only of anæsthetic applications, but of antiseptic ones, that "greasy" mixtures are objectionable. The oily material coats over the surface and bars out the agent whose effect is sought. It is true salves and oily mixtures have long been in popular favor, but this is no argument for their use when opposed by scientific reasons and well observed facts.

Neglected Pessaries.

Dr. Bates.—I present here a pessary that was in position for a period of eleven years. A lady æt. 60 years came to me recently and complained of symptoms which led to an examination in which this pessary was discovered. It was standing perpendicularly in the vagina and some parts of it almost over-grown by the mucous membrane and walls of the vagina. It was with the greatest difficulty that it was loosened up from its impacted position, as it completely filled the cavity. Upon inquiry I learned that eleven years previously while suffering from uterine symptoms she had called upon a physician in Belleville for treatment, and he, very properly, I doubt not, placed in her vagina this old fashioned gutta-percha flat ring and advised her to keep it there. She followed his instructions and has worn it through all these years, and would have worn it to her grave, but for the slight irritation recently set up by its presence.

Dr. Schlernitzaur, Millstadt. — I was recently called to the hotel in our town by a newly married gentleman to attend his young wife. He informed me that he feared he had discovered some abnormal condition in her development. Upon examination I found a Hodge's pessary in position which I removed to their great delight. The young lady had, some months before, been treated for a uterine affection and either did not know or had forgotten that a pessary had been introduced.

Carbuncle.

Dr. Rayhill, Belleville.—I would like to refer briefly to a case of carbuncle recently treated by me. I do this mainly because my treatment in the case was severely criticised by a neighboring physician and I wish to obtain the opinion of this society upon this subject. My treatment was deep crucial incision followed by a pretty strong solution of carbolic acid and flaxseed poultices. The case did well, but was a long time in recovering, and the criticism made was that no cutting should have been done.

Dr. Kohl.—Dr. Hughes, of St. Louis, wrote an article a year or two ago opposing the use of the knife in carbuncle and I suppose this is some of the fruit from the seed thus sown. There is no disagreement in the profession of surgery upon the treatment of carbuncle. Dr. Rayhill's treatment is the standard and only one, viz: free incision and antiseptics. There may be some difference of opinion about the details of the incisions and the particular antiseptic but these are only minor points.

Drs. Booth, Winton, DeHaan and others spoke on the subject and agreed in the above.

Diphtheria.

Dr. Raab, Belleville.—At our last meeting I reported two cases of diphtheria under treatment at that time, the local application being the new compound known as sulpho-calcine; and I promised to give a further report of my experience with this preparation. I have used it in a number of cases since that time, and my conclusion is that it is without special value. It is probably as good as any other local application. I could not use it in full strength but was obliged to dilute it more than one-half before it could be tolerated by the patient. It is true it coagulates the albumen, and, in some cases, seemed to stop the progress of the diphtheritic membrane, but other remedies will do this as well. I consider its action very similar to that of a strong solution of nitric or carbolic acid. I combined its use with the administration of bichloride of mercury and other constitutional treatment.

Dr. Fairbrother, East St. Louis.—"One swallow doesn't make a summer," but I have recently used sulpho-calcine as a local application in two cases of diphtheria and with very gratifying results. There is no doubt about its dissolving the membrane, and limiting its spread. I observed this with sufficient care in these cases to become convinced of it as a fact. It has a caustic action and I do not undertake to say that other remedies may not be equally efficient, but, I was so well pleased with its apparent effect in these cases that I shall certainly continue to use it so long as my experience with its action is so favorable. I used constitutional treatment also, but I do not use the bichloride as much as formerly. My impression is that this remedy is declining in favor with the profession. Dr. J. L. Wiggins, East St. Louis, read a paper before this society a year ago relating eleven consecutive cases of diphtheria with one death. The treatment was with the fluid extract of ground ivy. The doctor was led to have this extract manufactured by Parke, Davis & Co. from his frequent observation of the good effects resulting from a decoction made from the leaves of this plant in throat and other affections. Partly out of despair I have used this preparation, I believe, in every case that has come under my care during the past year, nine cases, so far as I remember, with one death. It is used locally, and also for internal administration. There is certainly something in the juices of some plants that acts favorably upon pathological conditions. The leaf of the jensing has maintained its position as a

therepeutic agent for centuries. The ground ivy also stands high in popular favor, and there is no reason why it should not have a fair trial in diphtheria.

Dr. DeHaan.—The chemical composition of the remedy spoken of, sulpho-calcine, would seem to make it eminently suitable as an application in diphtheria. There is no compound of sulphur that I know of where the sulphur is as readily set free as in this. In almost all chemical combinations the original elements are lost in the tertiary compound, while in this preparation the sulphur and the lime readily show their distinctive qualities when exposed to the air. The escape of carburetted hydrogen gives to it an objectionable odor. I have not used the compound, but only studied the sample left with me. I have tried the fluid extract of the ivy but do not believe that it has any effect whatever.

Dr. Winton.—I have gone over and over again the whole list of so-called diphtheria remedies, both old and new, and am not enthusiastic over any of them. But I have, in so many cases, had reason to believe that good result followed the free administration of the bichloride, and the local application of a 50% solution of the tincture of the chloride of iron, that I propose to stand by these two remedies and leave the specifies for somebody else to work upon.

Dr. Kohl.—This sulpho-calcine is to be used as a local application. It is maintained by its makers, and confirmed by some members of this society, that it will dissolve the diphtheritic membrane and stop its further spread. Admitting that it does this, what effect does that have upon the real disease? Does that stop blood poison? Does that prevent paralysis?

Dr. Booth.—Oh, yes; but it cannot be denied that in many cases when a local lesion is suppressed the constitutional symptoms are relieved. A small point of cellulitis may produce general disorder of the system. Remove the irritating cause and you relieve at once the general symptoms. I am an advocate of local applications in diphtheria and my favorite ones are the chloride of iron and the permanganate of potash.

SELECTIONS.

THE PREVENTION OF CONCEPTION.

(From Proceedings of Detroit Medical and Literary Association.)

Dr. C. B. Gilbert opened a discussion on the subject, "Is the prevention of conception a justifiable proceeding?" He observed that this was a question which was being talked about in private life and in private practice. We are put upon the witness stand as physicians and asked, Is this practice justifiable? There are many good reasons why it is justifiable. There are some reasons why it is not. Why should not a woman, if she choose, prevent conception? It seemed to him to be a purely private affair, and there was no reason why she should ask us this question. It is usually supposed that when a woman enters the married state she will become the mother of children. However poor she may be, however unable to support a family, however much suffering she may undergo, she is supposed to bear as many children as possible. He objected to this on the score of inability to provide for the offspring alone. It is not with us as among nomadic tribes or the Moslems, where the expenses of living amount to almost nothing. We have reached a higher plane of civilization, and we are prevented from availing ourselves of the conditions prevailing in a lower.

It was to be regretted that these matters were not taught in our schools, and that a man or woman should be compelled to learn the facts of sexual life from actual experience. He asked, if we gave the advice demanded— that the prevention of conception was justifiable—what would be the effect on ourselves? We lived under a law we could not avoid. If this practice was contrary to that, if it was injurious to the organism, it was wrong from beginning to end. That is why abortion was wrong. Then, there was another sanction, the moral sanction. Some say it is against the moral law. He replied that it was not. The moral law says nothing about the matter. It was not a question of metempirics, it was a question of utilitarianism. If the practice was unharmful—and he considered it was—there could be no reason against the practice. It might be asked what might be its effect on single life. Would it endanger our civilization, our common Christianity? He thought not.

Dr. Helen Warner had some convictions on the subject, which she scarcely felt prepared to formulate this evening. She was surprised to hear opinions so radical as those propounded by Dr. Gilbert. These she did agree with. She did occasionally advise the prevention of conception. She considered it justifiable in cases where it is impossible for the woman to bring forth a living child. A woman should not be allowed to undergo a pregnancy that was likely to be fatal to herself, and in such cases she had not hesitated to advise the prevention of conception. She had not hesitated in cases where the patient was insane, or likely to become so. She was by no means so sure as Dr. Gilbert that any means of prevention which was sure was harmless. And for that reason alone she would never advise a woman to prevent conception for the sake of gratifying an individual fancy, or even for the sake of not being able to support the offspring.

Dr. Frank W. Brown thought we all pretty well agreed on the matter of moral abstention. He asked if by the prevention of conception we alluded to moral or mechanical means. For his own part, he favored both methods. He favored the application of morals, and where that is impossible, other expedients. It is this teaching of morals which are not observed, which is so detrimental to the progress of humanity. We have too high a standard to work on. We should look this matter fairly in the face. We know something about the

ill-effects of surplus population. The law of Malthus shows that population tends to increase much more rapidly than means of subsistence. As a result of this came pauperism, and we all know pauperism is at the bottom of the greater portion of crime. This was an important consideration. Every year the progress of medical science is making the condition of the world healthier. We did not have any of the great epidemics of former years. These small epidemics, such as recently occurred in the South, were picayune affairs compared with the old epidemics which numbered their victims by millions, and the chances of diminishing offspring by these means are lessening every day. How, then, are we to control the increase of population? The way was to persuade people not to have so many children. He thought it useless to tell people to abstain from sexual intercourse. The sexual instincts were the strongest we have, and in 99 cases out of 100 such advice would prove impracticable. He thought that statistics would not prove that prevention was injurious to woman. They would, however, prove that abstention was bad for man. When asked to advise some method for the prevention of conception he did so, for it must not be forgotten that in the majority of cases some means will be employed, perhaps more harmful than those recommended by a physician. The facts of everyday life show us that a majority of people practice these methods, and among educated classes population is regulated. This high moral business would not go.

Dr. T. A. McGraw regarded this one of the questions which will in the future be considered from the standpoint of social effect, It seemed to him the medical press had taken a mistaken line in making the matter a medical question. He could not see any wrong in the prevention of conception. When a woman came to him, whose husband had strong desires, who had multitudes of children, who was poverty-stricken and sick, who suffered from nausea, and other burdens almost too great to bear, and asked how she was to prevent having more children, he scarcely liked to advise non-intercourse. To give such advice meant that the man would go to the brothel; it meant the breaking up of family ties and duties. It was an individual matter for each man and woman to say how many children they could support. These large and unmanageable families were wrong. The girls who were unprotected often went wrong. The boys became worthless without parental government. Far vaster wrongs proceed from large families than the prevention of conception. The conditions are altogether different now to fifty years ago, when every man could find support for ten or twelve children. He could not do this now, and should not be the parent of children he could not support.

Dr. A. L. Wordon said that there were doubtless many cases where this practice was proper and justifiable, but there were many cases where there was no excuse for it. It is not the poverty-stricken people, as a rule, who come to us for this advice. It is those who are able to support a family, in eight cases out of ten, but who from society reasons desire to be without children. He thought that we should discriminate whom we should advise, and beware of too much leniency.

Dr. Mulheron had not sufficiently formulated his ideas on this subject to express them here to-night. He was surprised to hear this called an individual matter. He regarded it as a society matter. When a man and woman entered the marital relation, they assumed certain duties to society. He did not consider that it was for us to lecture people on their social duties. If a woman considered she had a right to prevent conception, she would also have the right to empty the pregnant uterus. He considered the practice to be wrong.

Dr. Hutton agreed for the most part with the views expressed by Dr. McGraw. The question of how many children a family should consist of was a matter of individual and personal selection. The question was one of personal liberty, and if prevention could be accomplished without the infliction of physical harm, he had about made up his mind that it would be for the advantage of society. The actual means of prevention had not been spoken of to-night. He thought perhaps an irrigation of a bichloride of mercury solution might be effective.

Dr. Bonning thought it was unfortunate for people to bring forth so many children. The nations who do not regulate population were now unable to support themselves. This was seen by the emigrants who seek our shores, who were Irish, German, Polish, but seldom French. France is now one of the richest and most prosperous countries of the world. If prevention can be safely done, he was of opinion that it should be.

Dr. Gibson thought that every one should say exactly what he thought. He did did not consider it was right to do wrong that good might come. The practice is wrong, and he endorsed all that Dr. Warner had said. If the prevention of conception is right, abortion is right. He regarded it as homicide.

Dr. Chittick did not agree with this being an individual matter. He thought every physician should use his best judgment in giving advice.

Dr. Webber remarked that it had been said this evening we were not moralists. It is a well-known fact that through sin sickness and disease came into the world. It is through breach of the moral laws that we have, as physicians, obtained our employment. It is a natural law which brings man and woman together for the purpose of cohabitation, and it is one of the natural laws to allow the results of that cohabitation to fulfil their course. It is natural for a woman to menstruate. It is natural that this physical law should find its expression in the ovaries. The ovaries should have rest, and pregnancy was the natural condition of ovarian rest. By thwarting this law many diseases were engendered. Our American women are fast failing, and the women of the old country are taking their place. It will soon be a rare thing to find a woman who can trace her an-

cestry back three generations. He thought the practices alluded to were decidedly harmful.

Dr. Banks thought the natural period of rest for the ovaries were the inter-menstrual periods. There may be cases where it is right to prevent conception, but she did not agree with many of the speakers to-night.

Dr. Stevens considered that every one should formulate his own answer to this question. The question was one which could not be separated from morals. He believed conception should be prevented in those cases where child-bearing was dangerous to either mother or child. It should be prevented in all cases where heredity indicated mental incompetence. He thought that conception should be prevented by non-intercourse. He did not believe it was ever intended that the indulgence of sexual desire should be a pleasure, or that it should be pursued for pleasurable motives. A higher order of conduct prevailed among the lower animals than this would indicate.

Dr. Devendorf was delighted at the high morality of his friend, Dr. Mulheron; the angelic purity of the gentleman who had last spoken was beyond criticism, and as for the gentleman who described the practice as homicide, he would doubtless go in mourning after an erotic dream. We did not come here to discuss moral questions, but to inquire whether it is best for humanity to allow every man and woman to have as many children as possible. We know that nine-tenths of the educated classes are using means to prevent conception. As for the injuriousness of the practice, Dr. Van der Warker had some time ago examined a community in which the practices were carried out to the fullest extent, and no harm was found to have accrued to the females, and as for the males they could stand it. He thought it for the good of humanity to limit the number of children.

Dr. Carstens considered the ground pretty well covered. He did not agree with Dr. Gilbert that the affair was entirely personal. He thought it was a matter for the State. The reasons assigned by Dr. Warner for the prevention of conception were practically admitted as justifying abortion. He agreed with Dr. Stevens in preventing conception where hereditary reasons indicated; it was a positive crime for people to be married in the last stages of consumption. It was wrong for insane and criminal classes to perpetuate their race. He thought all insane and criminal individuals should be castrated. One of the objections to the prevention of conception was that it was practiced by those who ought to propagate the new race. Where the remedy was needed was among the pauper classes.

Dr. Gilbert, in concluding the discussion, again repeated that there were no laws regulating the propagation of children. It is a matter which must be left for individuals to settle. Every one agrees that it is as natural to have intercourse as to have children. He remembered being called to see a young man whom he found in a house of prostitution. The man had two children and a home, but his wife was cold and he had wandered into this resort. If the wife had known how to prevent conception, she would have been able to retain him at home. It was a shame that these matters should not be known; it was absurd and ridiculous.—*Cin. Med. News.*

BELLADONNA, LOCALLY APPLIED AS AN ANTI-GALACTAGOGUE.

M. W. Leavitt, M.D. (*Mass. Med. Jour.*), says: Mammary abscesses resultiug from over-distension of the lactiferous ducts is of frequent occurrence, and is alike a source of suffering to the patient and annoyance to the attendant. Every practitioner is familiar with the difficulties attending the management of the mother on the loss of her child, either on parturition or subsequently, in securing prompt and systematic removal of the lacteal secretion either by natural or artificial aids, until the functional activity of the organ is arrested or gradually ceases. It also occasionally happens that the mother, in attempting to wean her child, finds the established physiological activity of the mammary gland so persistent, that secretion continues even when its natural stimulant, nursing, is discontinued, so as to be productive of inflammation and suppuration. For some years I have been in the habit of using belladonna, applied locally, for its anti-galactagogue effect, and thus used have found it of signal benefit. My method of application is as follows: I cut out a circular piece of belladonna plaster of sufficient size to cover the breast, with a hole in the center about an inch in diameter for the nipple.

I have never failed in arresting the lacteal secretion by this method when the plaster has been of good quality and its adhesion to the integument perfect. It was a question in my mind whether the relation between the lacteal secretion and the physiological diminution in the tissues of the uterus following labor, was of such a nature as to unfavorably affect the health of the person were this function prevented or arrested; and I am happy to state, so far as I have observed, I could discover no injurious results. During the period of *allaitement maternal,* I consider the local application of belladonna of doubtful propriety, when used in threatened mammary abscess from over-distension of the lacteal vessels, owing to the danger of absorption into the mother's system, and its toxicological effect being produced upon the child through its mother's milk. One such case of poisoning has been reported within the past few months. While proper precautionary care will almost always enable us to avoid mammary abscess from the causes already mentioned, they are nevertheless frequently met with from neglect or lack of knowledge of either the attendant or the patient. I consider belladonna a valuable therapeutic agent in cases like those here narrated, and I ask such members of the profession as have not thus used it to give it an impartial trial.

A WEIRD TALE.

A fellow who swallowed a drachm
Of poison grew cold as a clachm,
And when somebody said,
"I don't believe he is dead,"
The corpse quietly shouted, "I achm!"

And since then they say that his ghost
Each night walks around his bed-phost,
And it scares all the folks
Who aren't used to such jolks,
Clear out of their senses almhost.

—*Chicago Herald.*

MEDICAL MATTERS AMONG ALASKA INDIANS.

Dr. Arnold, Assistant Surgeon in the U.S. Navy, writes from Sitka to *The Southern Practitioner* an interesting account of his observations of the medical customs of the natives of Alaska. He says:

"Judging from this ranche or village, which is by far the most enlightened one in the whole Territory, I should say that at least half of them are suffering from either cold abscesses, caseous lymphatic glands, hip-disease, Pott's disease or pulmonary tuberculosis. I have met as many as fifteen Indians in whom one of these disorders was evident at a glance, in half an hour's walk along a beach a mile away from their village. This condition of affairs coupled with a high relative sterility, explains the undoubted decrease that this village has undergone since the 'turnover', which is the Alaskan epoch."

Acute lobar pneumonia he describes as neither very frequent nor very severe. Dr. Arnold saw several cases and found the pneumococcus of Friedlander in the sputum. From unprofessional sources he heard of the disease farther north, and he thinks Loomis' assertion that pneumonia is unknown in Polar regions is incorrect.

The following observations are also to be found in his account:

"These Indians all use hot water, both for its local and its hæmostatic effects, and they resort to multiple punctures for injuries and chronic inflammatory troubles. The average Indian will submit himself to a severe surgical operation with alacrity, set his teeth in a bit of soft wood, and give little evidence of the pa n he must feel.

"Their therapeutic agents are rather limited, so far as I have learned. They use the inner bark of the devil's club, a sort of thorny shrub, as an emetic and purgative, and assert that the mode of its action is determined by the direction of strokes of the stone with which which they scrape it off. If they are made upward, it produces emesis, and *vice versa.* They claim an efficient abortifacient, but I have not yet seen the source of it.

"Their diet is largely composed of oil from the seal, herring, or the ooliean, a small fish in these waters. The latter is of reputed efficacy in phthisis, but a careful test of its usefulness has not been made. A reduction of this fat allowance is most probably the chief one of the causes of the great prevalence of this disease in Indians who adopt a civilized life.

"In many of the mission training-schools where the life of the girls is the most radically changed,it is almost an exception for the menstrual function to be established without the immediate inception of pulmonary phthisis; although another point to be considered is that orphans and girls either actually diseased or strongly predisposed by hereditary influence to constitutional disease, furnish a large number of these pupils.—*Northwest. Lancet.*

Hypnotism no Cure for Alcoholism.—The Society for the Study of Inebriety, we gather from a paper published in the "Proceedings" of that body, has come to the conclusion that hypnotism is not a cure which those of an over "drouthy" disposition can place any confidence in. But dealing specially with the subject, the writer of the paper declares that "No medical expert of repute in inebriety has endorsed hypnotism as useful in this malady, though marvelous tales of success have been claimed by non-medical individuals." The writer's own "experience and observation have compelled the conclusion that hypnotism has no practical application in the treatment of inebriety. On the contrary," he has "seen its repetition increase the nerve disorder, and thus intensify the diseased condition which constitutes true inebriety." Allowing that alcoholism is a neurotic disorder, this is not less than any one acquainted with the effect of hypnosis on the nervous system would have expected. In the post-hypnotic condition nervous irritability and "deadly exhaustion" of that system are found in various forms, such as convulsions, headaches, general malaise, nausea, and increased reflex irritability in all cases, and which, occasionally, is permanent. These, however, are only a few of the pleasures of hypnotism.—*Hospital Gazette.*

The Sanitary Value of Slack Water.—J. M. Safford publishes, in the *Tenn. State Board of Health Bull.*, a paper upon the influence of slack water navigation upon the public health. Slack waters form a series of pools in the course of a stream. The water is not stagnant, as in a pond, but the flow is regulated by the supply, the level remaining near the same point at all times. By this means, the uncovering of areas usually under water, and the occasional flooding of low lands usually dry, are in some measure prevented. Low, marshy spots near the stream are also covered; and from all these it results that the most fruitful sources of malaria are shut off.

If the water be used for drinking purposes, the slack waters act as subsiding reservoirs; and, as fresh water

plants grow more luxuriantly in them than in the shallow and rapid current of the natural channel, the water is purified by the action of both these agencies. Flushing is accomplished by heavy rains, and by the spring freshets.

Analysis of the river and well waters at Zanesville, by Dr. Culbertson, showed that the river water was beyond comparison the purest; and the same writer states that the death-rate from malaria, pneumonia, and diarrhœa is now less than it was in 1869.

Along the Shenango Valley, the abandonment of the Erie Canal, and letting-out the slack waters, has resulted in a widespread prevalence of malaria, which has not disappeared after ten years, though the type of disease has been somewhat modified. Here low tracts were uncovered which had for many years been under water, accumulating mud, laden with organic matter in abundance. The river water was not used for drinking, and the ague arose from emanations from the soil.—*Times and Register.*

Treatment of Dysentery by Enemata of Corrosive Sublimate, Etc.—It is now generally recognized that certain morbid conditions of the intestinal tract may be favorably modified by various drugs belonging to the class of antiseptics, among which the chief are calomel, bismuth, naphthalin, and thymol. It is a noteworthy fact that these substances are insoluble, and it is in virtue of this property that they are enabled to run the gauntlet of the absorbents and exert their specific action upon the intestinal contents. The best of all antiseptics, corrosive sublimate, has thus far been of little use for the purpose mentioned, because it was supposed that no benefit could be exerted by any but a lethal dose. While this may be true of its administration *per os*, it is shown by G. Lemoine (*Bull. gen. de Thera.*, January, 1890) to be a mistake so far as concerns administration *per rectum.*

Lemoine has treated 54 cases of dysentery by enemata of corrosive sublimate, and with the happiest results. The strength of the solution was one to five thousand, of which 200 grammes were administered three times a day; later, 200 grammes of a solution of 1 to 3000 were injected twice daily. Improvement showed itself, as a rule, after the first injection, the first symptoms to disappear being the tormina and tenesmus. In a certain number of cases the tenesmus was so great that the anema could not be administered without a preliminary treatment, which consisted in painting the sphincter with a 5% solution of cocaine.

In acute cases, a cure resulted from this treatment in from three to four days; whereas, in the more chronic cases which presented themselves for treatment on account of an acute exacerbation, a cure was effected, as a rule, in one day. The latter statement is somewhat startling in view of the well-known fact that chronic dysentery is decidedly rebellious to all the usual modes of treatment.—*Med. News.*

Bromide of Ethyl (C_2H_5Br.) is recommended by Haffter (*Deutsch. Med. Ziet.*) as anæsthetic in small operations. He gives it in a well-fitting, air-tight mask, in order that the vapor may be inhaled unmixed with air. The quantity to be used (from one teaspoonful to a tablespoonful) is poured at one time upon the mask, and within one-half minute the patient is so far under its influence that small operations can be begun.

The first thing noticed by the patient after a few inhalations is a peculiar crawling feeling in the arms and legs. This gives away immediately to a condition of apnœa, likewise of very short duration. There is no period of excitement as in chloroform anæsthesia, and sensation is lost before consciousness is. Ten seconds after the mask is removed, the patient is himself again, without those disagreeable after effects of ether or chloroform—dizziness, headache and vomiting.—*Times and Reg.*

Turpentine in Post-Partum Hæmorrhage.—I have used spirits of turpentine in post-partum hæmorrhage, and, in every case, with the best results. When the ordinary means, *i. e.*, friction over the uterus, irritation of the uterus by introduction of the fingers, cold, hypodermic injection of ergotine, etc., failed, by saturating a piece of lint with the turpentine, and introducing it with my hand into the uterus and holding it against the walls, rapid contraction took place, and all hæmorrhage instantly ceased. In one or two cases, when the patient was almost pulseless, it seemed to act as a stimulant. On no occasion did its action fail, nor did it cause the slightest inconvenience, except in one, when the side of the patient's thigh was slightly blistered by some that came in contact with it, but it gave very little annoyance. I consider it to be much quicker and safer in its action than any other remedy; it does not cause any injurious result, and besides, it is much more easily applied. In country practice, getting hot water, or using injections often entails loss of valuable time.—E. Merwin, M.D., in *London Lancet.*

Treatment of Incontinence of Urine in Women.—In cases of irritability of the bladder following cystitis in elderly females the irritability has been found to be due to a reduction in size of the interior of the bladder, caused by a hypertrophy of the muscular coat. It may be happily treated by gradual dilatation by means of water introduced through a silver catheter. The water should be tepid. The injections should be repeated once daily; a Higginson syrine should be used. Thus treated, a bladder which can retain two ounces of fluid may, at the end of three months, be enabled to bear eighteen. After the bladder has reached a certain degree of distention the incontinence ceases. This method may also be, and has been, used with success in the incontinence of urine in children.—*Revue Obstetricale et Gynecologique.*

USEFUL FORMULÆ.

PATENT MEDICINES.—The following formulæ of patent and proprietary medicines we take from the *Therap. Analyst*:

Carter's Little Liver Pills.

℞ Podophylli, - - gr. iss.
Aloes soc., - q.s. grs. iijss.
Muc. acaciæ.
M. ft. mass in Pil. No. 12 div.
Sig. 4 to 8 at night.—*New Idea.*

Ely's Cream Balm.

℞ Bismuth. carb., - - grs. xv.
Thymol, - - grs. iij.
Ol. gaultheria, - - ♏ij.
Vaselin, - - - ℥j.
M. —*Kilner's Modern Pharmacy.*

Eno Fruit Saline.

℞ Soda bicarb., - - ℥iss.
Ac. tartaric, - - ℥j-ʒj.
Rochelle salts, - - ʒvij.
M. —*New Idea.*

Castoria.

℞ Senna, - - - ʒiv.
Manna, - - - - ℥j.
Rochelle salts, - - ℥j.
Fennel, - - - - ʒiss.
Aquæ bullientis, - - ℥viij.
Sugar, - - - - ℥viij.
Ol. gaultheria, q. s.
M. Pour the water on the ingredients. Cover and macerate until cool, then strain and add the sugar and wintergreen.—*Ind. Pharmacist.*

Hall's Catarrh Cure.

℞ Gentian root, - - ʒiss.
Bitter orange peel, - - ʒv.
Cardamom seeds, - - ʒiss.
Potass. iodide, - - ℥j.
Dilute alcohol, q. s.
—*New Idea.*

Hamburg Tea.

℞ Senna, - - - ʒviij.
Manna, - - - ʒiij.
Coriander, - - - ʒj.
M. —Dr. Sargent, *Med. World.*

Hayden's Viburnum Compound.

℞ Cramp back, - - - ʒiv.
Black haw, - - ʒij.
Skunk cabbage, - - ʒij.
Syrup, - - - ʒiv.
Tr. cinnamon, q. s. ad. ʒiv.
M. and filter after 24 hours.— *Western Druggist.*

Langell's Asthma Remedy.

℞ Pulv. belladonnæ fol., - ʒj.
Pulv. potass. nitrat., - - ʒx.
M. Sig. Burn one-half teaspoonful two to six times a day in a close room.

Radway's Pills.

℞ Aloes, - - - - ʒj.
Jalap, - - - ℥ss.
Zingiberis, - - - ʒss.
Myrrh, - - - ʒss.
M. ft. mass, in Pil. No. 60 div. Dose.—*Colley.*

Radway's Ready Relief.

℞ Tr. saponis comp., - - ℥iss.
Tr. capsici, - - ℥ss.
Aquæ ammoniæ, - - ℥ss.
Alcoholis, - - ℥ss
M. —*J. J. Cooley.*

Ayer's Cherry Pectoral.

℞ Morphiæ acet., - - grs. iij.
Vini antimonii, - - ʒij.
Vini ipecac, - - - ʒiij.
Syr. pruni virg., - - ℥iij.
M. —*Pacific Med. and Surg. Jour.*

CARIES OF THE TEETH.—According to Miller, the following formulæ may be useful in the prevention of dental caries:

℞ Thymol, - - - grs. iv.
Benzoic acid, - - grs. xlv.
Tincture of eucalyptus, - ℥½.
Alcohol, - - ℥iij.
Essence of peppermint, 10 drops. M.
℞ Thymol, - - grs. iij.
Benzoic acid, - grs. xlv.
Tincture of eucalyptus, - ℥½.
Chloride of mercury, - grs. x.
Essence of peppermint, - 10 drops. M.

For these to prove efficacious, it is necessary that the mouth should be thoroughly rinsed, and that the liquid should find entrance into the spaces between the cheek and the gums, and also the spaces between the teeth. Particularly is this the case after animal foods have been taken.—*Ther. Analyst.*

SHOULD there be much inflammation and pain about a loose tooth, great relief can be obtained by painting the gum three or four times daily with a solution of

℞ Cocain. hydrochlorat., - grs. iv.
Glycerinæ, - - - fʒij.
Aquæ, q. s., ad - - f℥j. M.
Sig. For local use.

When the first or second molars cause the trouble, free lancing, with an oblique crucial incision, is to be recommended. Much good can also be done in the way of softening the gums and lessening pain by a thorough application of

℞ Zinci chloridi, - - gr. j.
Vin. opii, - - fʒj.
Glycerinæ, - - fʒij.
Aquæ rosæ, q. s., ad - f℥j. M.
Sig. Apply to tender gums with a brush or soft cloth thrice daily.—L. Starr, in *Ther. Gaz.*

ORIGINAL ARTICLES.

THE NEW TREATMENT OF PERITONITIS.

BY EMORY LANPHEAR, M.D.,

Surgeon to East Side Dispensary, Orthopædic Surgeon to University Medical College, Kansas City, Mo.

In the treatment of peritonitis the rule of the late Alonzo Clark, "put the bowels in splints—i. e., secure perfect rest for the inflamed surface by the use of opium"—has been pretty generally followed. To constipate the bowels, to completely check peristaltic movements, and to "support the inflamed structures" has been the seductive and scrupulously-followed teaching of the best physicians and surgeons of the past; and indeed there are many prominent men to-day who would deem a departure from this generally accepted plan as bordering upon malpractice.

Even so late a writer as George Ross, M.D., Professor of Clinical Medicine in McGill University, Montreal, says, in that recent work, "Wood's Reference Handbook of Medical Sciences:" "Opium is still the drug chiefly relied upon and almost universally employed." And in the concluding paragraph he remarks: "There is no doubt that in the near future much can be hoped from surgical interference, especially in those desperate cases of peritonitis from perforation. Up to the present the cases are few—too few to lead to any dogmatic statement for or against the procedure."

To both of his propositions I desire to enter a vigorous protest, for the treatment of surgical peritonitis, at least, has recently undergone a radical change in the hands of the masters—and for the better—under the leadership of Mr. Lawson Tait, who was among the first to recognize the uselessness, nay, the absurdity, of the opium treatment. Mr. Tait claims that with sulphate of magnesia in the early moments of peritonitis he can abort the disease, and later on by opening the abdomen he can cure cases which under the old plan of treatment would inevitably die. Nor has he been alone in this departure from the old practice. W. Gill Wylie, of New York, is as earnest in his advocacy of the new line of treatment (I am told) at is Tait and his followers upon the eastern shores of the Atlantic; and recently Matthew D. Mann, of Buffalo, one of the prominent surgeon-gynæcologists of America, confessed his disbelief (before the Buffalo Medical and Surgical Society) in the opium method and endorsed the operative and saline treatment.

Taking up Prof. Ross' last statement first, I would say that while it is not settled that operative measures are called for in simple acute peritonitis, yet many have declared in favor of such treatment; and nearly all recent writers agree that when the inflammatory process has gone on to suppuration the only proper treatment is to freely open the abdomen, evacuate the pus, thoroughly wash the cavity, and put in a drainage tube if necessary. This is being done even in the so-called "idiopathic" peritonitis. Munde and Wells[2] quote Tait as "reporting[3] eight cases of acute peritonitis treated by laparotomy and drainage after careful cleaning of the abdominal cavity. Six cases recovered, of which number two were pregnant at the time of operation and went safely on to term. The two that died were moribund from delay. He pleads for early operation and believes that many lives otherwise doomed can and will be saved by the procedure." Pondrez,[4] William H. Meyers,[5] of Fort Wayne, Indiana; L. S. Mc Murtry,[6] of Louisville, Ky.; Thomas Ophie,[5] of Baltimore; R. Stanbury Sutton,[5] of Pittsburgh, and others, have all declared in favor of operation. E. E. Montgomery,[7] of Philadelphia, states that "peritonitis should be regarded as a positive indication rather than a contra indication to operation." And Edwin S. Ricketts,[5] of Cincinnati, says: "I feel that the death rate in peritonitis is going to be greatly lessened in the next few years by abdominal section. The trouble in these cases is to have the general practitioner understand the gravity of the disease early enough."

When tubercular peritonitis is diagnosticated, or even strongly suspected, abdominal section is now acknowledged as not only justifiable but positively indicated, though just "why a simple incision and drainage caused the disappearance or arrest of the tubercular disease is, as yet, an unsolved problem." Of 17 cases reported as operated upon during 1888,[8] 13 were cured, 3 probably cured, and 1 relieved for a time; the diagnosis was made before the operation in but four instances.

So much, briefly, for tubercular suppuration and surgical peritonitis; what of the so called idiopathic variety? Although Pawlowski claims to have demonstrated that peritonitis is due to a specific micro-organism, I cannot but believe that *all peritonitis is essentially traumatic in character!*—hence practically the same as surgical peritonitis.* While I am as yet unable to demonstrate this, I am convinced that every necropsy conducted carefully will tend to confirm this theory. And practice in cases pronounced "idiopathic," based upon the rules governing the treatment of peritonitis following

*Bumm, Wurzburg, has shown that the streptococcus pyogenes is very deadly when taken from the peritoneal fluid in the early stages of puerperal peritonitis; but Orth has demonstrated that strong infusions of pure cultures of both staphylococcus pyogenes aureus and streptococcus pyogenes may be thrown into the peritoneal cavity without any bad effect if that cavity be in a physiological condition; if, however, there be a diseased condition of the peritoneum (as in ascitic animals) or if any of the intra-abdominal organs be wounded (as in excision of a piece of mesentery) or if the same amount of germs be mixed with a material which is not easily absorbed, deadly results are speedy and certain. This shows the necessity for absolute asepsis in abdominal operations. It is a curious fact that if the staphylococcus be injected into the blood or into a compound fracture, rapidly fatal peritonitis is set up.

abdominal section, will soon prove the similarity if not identity of the two forms of peritonitis, and will, I am sure, demonstrate the efficacy of salines in all cases of inflammation of the peritoneum save those due to perforation, as in typhoid fever. (Here—as in suppurative peritonitis and perforation from gunshot and other wounds—I believe a free opening is justifiable; the attempt should be made to form an intestinal anastomosis and an excision of the diseased gut made). Years ago—in 1881—I became imbued with the idea that salines were superior to opium in the treatment of peritoneal inflammation; this plan was urged upon me by my preceptor and partner, Dr. G. D. Maxson, Hanford, Kansas, who for at least twenty years had been successfully treating cases of peritonitis by sharp doses of sulphate of magnesia given at the very beginning of the attack.

He claimed that opium possesses, really, but little curative power over the inflammatory process; that it retains within the bowels irritating fæcal matter that can but increase the trouble; that by completely checking peristaltic movements it leads to the formation of adhesions; that it stops excretion and so prohibits the elimination of the poisonous products of the inflammation; and that by benumbing the sensibility it gives the physician a feeling of (false) security which is undesirable. Upon the contrary, the administration of the saline cathartic has the power of arresting the disease if given in the stage of invasion. Here the peritoneum is simply congested or just taking on an inflammatory action — the pain is not very severe, the abdomen not greatly distended, the fever not high; but the physician is called, recognizes the danger and immediately gives the saline. If it be the initial stage of a simple peritonitis, if it be the beginning of a puerperal peritonitis, or if it be the sthenic stage of a septic peritonitis, the indication for the cathartic is clear; in either instance the blood-vessels are turgid with blood—the circulation impeded; the taking away of a considerable amount of serum from the abdominal viscera must profoundly affect the peritoneal circulation and assist in restoring the normal state. Besides the active peristaltic action prevents the formation of bands and adhesions if the inflammation does go on; and experience at the bedside demonstrates that as the inflamed surface is relieved from engorgement by the emptying of the internal vessels, the temperature and the pulse rapidly decline, while the pain disappears almost as speedily as under opium.

If the disease has gone on to the second stage, where the fever is high, the pain intense, the tympanites marked, and the pulse rapid and wiry, cathartics are not so strongly indicated, though small doses of sulphate of magnesia and tincture of belladonna may often be given with advantage; here the danger is collapse and as vital force must be conserved violent purgation is not justifiable and opium must be given—not to check peristalsis, nor to "put the bowels in splints," but to deaden the pain in the many terminal nerves of the peritoneum, to sustain the heart, and to prevent shock. The bowels must be kept free from irritating fæcal matter by enemata if possible, by a good cathartic if necessary; tympanites must be controlled by turpentine, either internally or by stupes; and the strength must be maintained by milk, whisky, etc.

Such was the teaching of my guide—Dr. Maxson. I was greatly biassed in favor of opium by reason of my college instruction, but had great faith in my preceptor. So side by side I tried the two methods of treatment; cases apparently alike received measures as opposite as the antipodes; the result was that I have almost wholly discarded the old therapeutics and after a rather extensive experience I can heartily endorse the statement of J. Ewing Mears,[9] Philadelphia: "The propriety of surgical interference in acute, serous peritonitis, which for want of a better term has been designated the idiopathic variety, arising from an attack of enteritis or indigestion, exposed to cold, or associated with inflammatory conditions of the uterus or its appendages, may still be said to be undecided. Evidence is not wanting of the successful results obtained by medical treatment, *especially in the use of saline purgatives.*" (Italics mine.)

The following cases are condensed from notes; a small number only is selected, as I simply desire to present histories having a similarity of symptoms and causation.

Case 1. Alvin T———, æt. 10 years, fell from a swing, striking the abdomen across a log; he immediately complained of pain in right inguinal region, with vomiting; fever and tympanites soon appeared. Twenty-four hours after injury patient presented every evidence of acute traumatic peritonitis; was at once put upon large doses of opium and treated according to the most approved plan; promptly died on the fourth day. Autopsy made (Drs. Sutton, Maxson and Shafer, of Hartford, Dumbauld, of Strawn, Kansas, and myself present) six hours after death, showed acute general peritonitis; total absence of any cause save traumatism.

Case 2. George H———, æt. 11 years, was thrown from a horse in early morning; was seen two hours later by Dr. Reser, Neosho Rapids, Kansas, who enjoined quiet and gave small doses of Dover's powder. In evening pain was intense, especially in right side, with small, painful tumor in right inguinal canal. Dr. Reser being inaccessible, Dr. ——— was called, used chloroform locally, and gave (blindly, but correctly) 10 grains of calomel; at 4 P.M. next day I was called upon to operate for "strangulated hernia"—such being the diagnosis of Dr. ———. Upon examination I found the inguinal canal filled with peritoneal tissue and *an undescended testicle!* This was the "strangulated hernia;" but the serious matter was a well marked, typical case of acute peritonitis. The "hernia" having been attended to the patient was given an ounce of magnesium sulphate, followed by calomel every hour, with one hypodermic injection of morphine sulphate (gr. $^1/_8$

and atropine sulphate gr. $^1/_{60}$). Thirty minims of tincture of belladonna and ½ ounce of tincture of hyoscyamus were put in a glass of water and a teaspoonful given every hour between the calomel. Improvement was immediate and in a week the patient was entirely well.

Case 3. Alfonso R———, æt. 36 years, while overheated by plowing, was suddenly taken with quite severe pain in the region of the ileo-cæcal valve, followed soon by symptoms of acute perityphlitis, which in a few hours became a general peritonitis. Opium treatment was pushed to fullest extent; patient died on fourth day. Post-mortem showed acute "idiopathic" peritonitis, abdomen already filling with sero-pus. (This case, I am sure, I should have cured under saline and operative treatment).

Case 4. Mrs. Geo. C——, æt. 32, while over heated from picking cherries, was seized with colicky pains in abdomen, for which hot drinks and fomentations were used for 30 hours. When called I found her suffering much pain, the abdomen was tympanitic and tender, the temperature 103°F., pulse 120 and thready. Turpentine stupes were applied, a sharp dose of magnesium sulphate ordered, followed by small doses of Rochelle salt; the pain disappeared, the temperature fell, the rapid, wiry, "peritonitic" pulse vanished, and the patient made a happy and prompt recovery.

Case 5. Mrs. Lily L———, æt. 26 years, was seized on Friday evening with peritonitis; she was placed upon full doses of opium; on Saturday she was seen by Drs. L. D. Jacobs, of Emporia, Kansas, and G. D. Maxson, of Hartford. The former advised continuance of opium, the latter upon enemata and small doses of sa lines with proper stimulation; Dr. Jacobs being the senior consultant, and his counsel in accordance with all teachings, his advice was followed; on Monday morning the patient was a corpse.

Case 6. Mrs. Geo. P———, æt. 27 years, was apparently an exactly parallel case; instead of opium she was given the saline treatment; recovery speedy and uneventful.

Case 7. Mrs. S. D., æt. 36 years, was seen one week after an abortion, probably self-induced, at 3½ months. She had retained placenta and a well-defined "puerperal fever"—septic peritonitis. The uterus was promptly emptied and washed, large doses of opium being at the same time given to "control the inflammation" *a la* text-book. She was buried four days later.

Case 8. Mrs. J. R. K———, æt. 35 years, in seventh pregnancy aborted at 3 months. On the tenth day I found her with retained placenta, peritonitis well developed, temperature 103°, pulse 140, face anxious, etc. Uterus was cleaned and washed, and one ounce of mag nesium sulphate given, followed by Rochelle salt in small doses, alternating with quinine and small doses of codeine sulphate.* Convalescence was rapid and satis factory.

Recent medical literature is rich with similar cases. Dr. Charles Kennedy,[10] of Chicago, gives his unqualified support to the cathartic treatment, but prefers calomel to the salines. Prof. G. W. Miltenberger,[11] Baltimore, reports several cases of acute "idiopathic" and puerperal peritonitis where two drachms of sodii et potassii tartaratis were given as often as necessary to freely relax the bowels. The relief afforded to the pain and soreness was quick and lasting and recovery prompt and complete. Suckling[12] reports a case of peritonitis due to typhlitis from fæcal impaction, in which he ob tained excellent results from half dram doses each of magnesium sulphate and sodium sulphate in combination with ten minims of tincture of belladonna. W. E. B. Davis,[13] Birmingham, England, refers to a large number of cases treated by him in the most satisfactory manner by purgation—including several cases of threatened peritonitis after laparotomy; he characterizes the "opium splint" as irrational, though morphine may be given to quiet pain, to check persistent and uncontrollable vomiting, etc; but at the same time calomel, in small and frequently repeated doses, should be dropped on the tongue and the bowels induced to act.

Herman Mynter,[14] of Buffalo, has used the cathartic treatment; "the result was immediate and most gratifying, all the symptoms promptly disappearing." He regards the method practised by Baldy,[15] Philadelphia, as the most reliable one, viz.: one ounce of sulphate of magnesium is given at one dose and repeated four or five times at proper intervals until at least ten or more copious, watery evacuations occur.

F. L. Sim,[16] Memphis, Tenn., reports two cases carried to a successful issue; at the time when first seen they had a temperature of from 102°F. to 104°F., pulse 140 to 160, respiration 28 to 30, abdomen tympanitic and extremely tender and pain almost unbearable; they were treated by gentle saline laxatives, with just enough deodorized tincture of opium to quiet the pain; the high temperature was controlled by phenacetin; turpentine stupes were employed for the abdominal distention. Dr. Sim says: "the opium given conjointly with the saline laxative is not irrational, for the inflammatory products are not locked up, nor is peristalsis so paralyzed as to cause obstruction of the bowels by adhesions, nor could I conceive the advantages to be derived from keeping the patients perfectly quiet"—on the contrary, they were allowed to turn gently from side to side, change positions in bed, etc.; syrup iodide of iron was administered as after treatment.

John H. Musser,[17] Philadelphia, in an article on the medicinal treatment of peritonitis, gives a summary of 26 cases, all in private practice, treated by small doses of calomel, olive oil enemata, etc., without opium (except one or two small doses of morphine and atropine when pain was excessive); 19 recovered without surgi-

*I now use codeine sulphate extensively in doses of gr. ss–gr. ij where I formerly employed opium or morphine. It does not nauseate—above all does not constipate, and in most instances is eminently satisfactory.

cal interference, 4 convalesced after laparotomy, and 3 died! Truly a most remarkable showing. His method consisted in local blood-letting until pain is much relieved, ("better," he says, "too much than too little blood to be abstracted"), or if more than 48 hours have elapsed, a blister; liquid diet absolutely, and stimulants administered freely to prevent collapse; cracked ice; lime-water and iced champagne for thirst, if desired, but sips of hot water or hot whiskey and water are better; calomel in small doses hourly until the bowels are moved freely; veratrum or aconite for fever; whisky, digitalis, atropine and amyl nitrite if collapse be imminent. While Dr. Musser's cases did not receive salines, the plan of treatment was the same—that of purgation instead of opium, and the results were startlingly favorable, for of these cases 14, at least, were desperately ill at the first visit of the doctor.

Many more cases, especially those following laparotomy, might be given with like favorable results, but these suffice to show that prominent men are changing from the opium to the purgative treatment of this disease, and with a greatly decreased mortality. Recalling, then, the experience of my preceptor, remembering my own cases and adding thereto the accumulating weight of evidence, my conclusions are that:

1. The saline treatment should be adopted early in simple acute peritonitis.

2. Small doses of calomel may be given to mild purgation in cases seen after the disease is fully developed.

3. Cases which fail to be relieved by cathartic measures should receive early operative interference.

4. Whenever peritonitis has gone on to that stage where the formation of pus is known, or even suspected, to have taken place, abdominal section and drainage is imperatively indicated.

5. When the existence of tubercular peritonitis is diagnosticated, or strongly suspected, operation (exploratory incision) is justifiable.

6. Opium is only indicated in the second stage of peritonitis, and then not because it "forms a splint," but because it relieves pain, sustains the heart, and prevents shock—thus combating the tendency to death.

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A CASE OF PROLAPSUS RECTI CURED BY EXCISION.

REPORTED BY ROSS P. COX, M.D.,

Resident Surgeon to St. Agnes' Hospital, Philadelphia.

M. D., æt. 22 years, female, single, book-binder, admitted April 10, 1889. Family history of tubercle and Bright's disease. General condition of atony and malnutrition. She first observed prolapse of rectal mucous membrane one year ago, following habitual straining at stool and a relaxed state of the tissues. In consequence of recent vesical disturbance, the difficulty has steadily increased, until now every attempt to evacuate the bowels is apt to be followed by a rectal prolapse of two and a half inches, acompanied by bleeding, great pain, and, at times, temporary inability to return the extruded bowel. Recently she has been afflicted with severe dysmenorrhœa, irritable bladder, and a slight prolapsus uteri. Frequent use of the catheter is required. She spends most of her time in bed, is totally incapacitated for all work, and suffers such constant pain and discomfort that life is become truly burdensome.

She was put to bed; was given a light but nutritious diet, with pepsin and pancreatin, quinine and iron; and ʒj doses of salt, or pulv. glycyr. comp., p. r. n., to maintain solubility of bowels. She was kept in the recumbent posture when the bowels or the bladder were evacuated. Various vegetable and mineral astringents were applied to the part when prolapse occurred. Hypnotics and both dry and moist heat were used to secure rest and relieve pain.

By these means all prolapse was prevented, first for a period of ten days, and later, for thirty-one days, when, in spite of all efforts to the contrary, the difficulty re-established itself in the original degree.

Conservative measures were tried for over three months, and, excepting some improvement in general health, the condition of the patient was not at all relieved. In view of these facts, Profesfor W. W. Keen, the surgeon on duty, determined to resect the prolapsed bowel and thus attempt a radical cure.

The patient was prepared with purgatives and enemata. Operation July 17, 1889. The sphincter ani having been paralyzed by over-stretching, the mucous membrane was seized by volsella and slight traction made. The outer fold of tissue was divided circularly near the sphincter. After careful dissection it was ascertained that the prolapse did not involve the peritoneum, but extended just to its reflexion. The inner fold of bowel was then cut off at about the same level as the first incision. Several hæmorrhoidal vessels re-

quired ligation with catgut. The ring of excised bowel was two and a half inches long. The lips of the two incisions were approximated with sixteen catgut sutures, and the part was carefully placed in situ.

She was put to bed suffering from considerable shock. Hot bottles and brandy produced satisfactory reaction. Two hours after operation, pulse 102; temperature, 97.6°F. Morph. sulph. gr. ¼ to relieve pain and procure sleep. Diet milk and broths. Salts ʒj every six hours; catheter four times daily.

July 19, 1889. Continued the use of the catheter; bowels soluble, easy movements; less salts. Pain moderate. Pulse 114; temperature rose gradually after the operation until this morning, when the maximum, 101.6° F., was reached. Fever mixture of morph. sulph. gr. ⅛; tr. aconiti gtt. ij; liq. pot. citrat. f ʒiv, every four hours as required. Diet continued.

July 24. Continued favorable progress; occasional use of salts and catheter; same general treatment.

July 27. Examination shows wound healed; very little pain on defecating; laxative p. r. n.; normal temperature established. Light diet.

August 8. Doing well in every way. Blaud's pill t. d.

August 18. Sat up; quite comfortable.

September 18. General health much improved; no pain on evacuating bowels or bladder; dysmenorrhœa, etc., almost entirely relieved; not the slightest prolapse.

She was seen seven months after the operation; nothing which had been gained by the operation had been lost, excepting some recent dysmenorrhœa and occasional inability voluntarily to empty the bladder. General health excellent; does hard work.

TRANSLATIONS.

FROM THE FRENCH AND GERMAN.

BY F. NEUHOFF, M.D., ST. LOUIS.

Operating Antiseptically by the Use of a Sterilized Solution of Table-Salt.

Never until the present time have theory and practice in medicine so perfectly progressed in unison. Bacteriological researches, especially, have frequently caused important changes both in practical prophylaxis and therapeutics.

It is not without great difficulty, however, that a new method of practice is introduced. But it is still more difficult to change, on account of theoretical deductions, a seemingly perfect and recently introduced method of procedure. Nevertheless, this is precisely what happens, and we are forced, almost yearly, to change our techniques, apparatus and principles in surgical operations.

The spray has come and gone. The use of antiseptics was a vast improvement on the old pre-antiseptic methods of operating. But of late we have become convinced that carbolic acid and bichloride ought not to be introduced into fresh clean wounds; that dirty wounds must be cleansed, but that clean wounds are only injured by antiseptic agents.

Thus aseptic methods replaced antiseptic methods, and by the use of sterilized water, it was found possible to perform the most difficult operations with splendid results. Especially in laparotomies must we shun all antiseptic drugs.

But sterilized water has, in its turn, been displaced. I have substituted for it a .6% solution of common salt in sterilized water. This is the percentage of salt found in the blood. To demonstrate that this salt solution is the least harmful in its effect on normal tissues, all that is required is to examine microscopically first epithelium which has been subjected to the influence of pure water, and then epithelium which has been subjected to this, so to speak, physiological solution of salt.

On coming in contact with the peritoneal surface, salicylic, carbolic or boric acid are apt to cause collapse and weakening of the pulse. On the other hand, pouring a warm (up to 38.5°) salt solution into the peritoneal cavity of a collapsed patient will cause a strengthening of the pulse. In fact, such douching of the peritoneum, in conjunction with the bathing of the extremities with hot (43°C.) water, constitute the best remedies in collapse occurring during an operation. As a result of the use of the above mentioned salt solution in operations, patients who have been operated on will rally better and experience less pain than under the old treatment.

I would, therefore, recommend the salt solution to be used in all surgical operations. Of course the disinfection of the hands, instruments and integument by methods now in vogue must not be neglected.—Prof. Fritsch, in *Deutsch. Med. Woch.*

Causes of Death After Laparotomy.

Septic infection is the most frequent cause of death after laparotomy. Next in order come heart affections. Besides pigmentary and fatty degenerations of the heart muscle, there may occur a degeneration of the heart due to subacute chloroform poisoning, which shows itself by an increasing collapse leading to a fatal termination after twelve or fourteen hours. Heart affections are especially prone to occur in weak patients, and in patients who have lost much blood.

Lung troubles may also be a cause of death. Besides hypostasis, there may occur bronchopneumonia produced by the flowing into the bronchi of secretions, vomited matter, etc. Predisposing to these accidents are, weakness of the patient, weakness of the heart, and hindrance of expectoration during the operation. Ether narcosis, inasmuch as it increases the secretion of the respiratory passages, will also favor the occurrence of lung trouble.

A fourth cause of death arises from kidney trouble. Chloroform narcosis, increasing the amount of albuminuria and apparently (especially in conjunction with certain antiseptics) causing fatty degeneration of the renal epithelium, may lead to certain death by syncope. —*Deutsch. Med. Woch.*

As to Vaccination.

The accidents resulting from vaccination from arm to arm have so thoroughly agitated the inhabitants of northern France that the French Academy has employed a number of medical men to discover, if possible, a substitute for this method of obtaining virus.

Using the virus obtained from heifers offers a protection against inoculating syphilis, but not tuberculosis. It is therefore necessary to look for another source.

Dr. Chonneau-Dubison has experimented with shegoats, and has found that vaccine obtained from them is inoculable in the infant. M. Hervieux has confirmed these experiments.

Tuberculosis is exceedingly rare in goats. Indeed MM. Trasbot and Nocard have never seen a case arise spontaneously in these animals, and only with difficulty can it be produced in them experimentally. The shegoat is therefore the most appropriate source for vaccine virus.

The only trouble is that goats are not sufficiently numerous to be used for vaccine cultivation to the exclusion of heifers.—*L' Union Med.*

Prophylactic Treatment of Syphilis by Destruction of the Initial Lesion.

From his interesting article in the *Gazetta deg. Ospitali*, V. E. Ingria draws the following conclusions:

1. The destruction of the initial syphilitic lesion sometimes prevents syphilis. But this method is unreliable, and one can not obtain great service from it, especially when the lesion has already been present for many days. Operative interference is utterly inexpedient when once the induration of Hunter has appeared, and even more so when specific buboes exist.

2. Destruction of the lesion ought to be attempted only when the lesion is recent, small, and situated where its removal will not be followed by deformity.

3. Excision, even when not preventing syphilis, may be advantageous as a means of treating the ulcer.

4. This treatment does not appear to have any power to attenuate the infection.

5. The destruction of erosions not infectious, not having the character of a syphiloma, is very rational. Since, on account of the uncertainty of diagnosis, it is difficult to prove the prophylactic efficacy of this procedure, we ought to admit it as a therapeutic principle, provided it does not entail local deformity.

6. Excision is to be preferred when the lesion is already developed, and is situated on parts which by their mobility are suitable for the operation. Otherwise the thermo-cautery should be brought into requisition.

7. My four observations only prove once more the difficulty of demonstrating experimentally the value of the treatment in question. While the first two cases do not suffice to condemn it, the two othere do not warrant the singing of its praises.

8. In order to have patients at our disposal for further investigations, we must make known to the public that an innocent looking lesion may cause syphilis, and that early surgical interference may prevent it.—*La France Med.*

Infection by Typhoid Bacillus Without Intestinal Lesions.

M. Vaillard communicated to the Societe des Hopitaux a case of infectious disease, in which he discovered the presence of the typhoid bacillus and the streptococcus without there being any intestinal lesions.

A young soldier, convalescent from slight "grippe," presents successively headache, great lumbar pains, cerebral excitation with a temperature of 40° C., and abundant epistaxis. There soon followed coma vigil with complete anæsthesia, contraction of the nape of the neck and of the muscles of the pharynx, and obstinate constipation. Death occurred on the tenth day, after a brief warning of cerebral symptoms.

The autopsy revealed general congestion and localized œdema of the cerebral and spinal meninges. The lungs were congested; the spleen, swollen and softened, weighed 280 grammes. There was no alteration of the intestine.

Cultures on different media were made with the splenic pulp, blood from the lungs and parts of the spinal marrow. They revealed a bacillus, morphologically like the typhus bacillus described by Eberth, Gaffky, Chantemesse and Widal.

Besides, there was found in the spleen and the meningeal exudate, the streptococcus which has been described as occurring in cases of fatal "grippe."

The patient has, therefore, succumbed to a mixed infection of the streptococcus and of the typhoid bacillus.

M. Vaillard claims that typhoid fever has in this case run its course without its usual train of symptoms and lesions. Why should not typhoid infection be able to exist without manifesting the intestinal signs and localizations described by Louis and his successors?

Banti has observed a case of ileo typhus, without appreciable intestinal lesions, but in which the typhoid bacillus was found in the spleen and mesenteric ganglia.

Adinot cites a case of meningitis without intestinal alteration, in which the meningeal exudate contained a bacillus which he identified (though without positive proof) as being the typhoid bacillus.

Vaillard thinks, therefore, that in certain cases the typhoid bacillus may cause a fatal infection, without producing the lesions characterized as pathognomonic of typhoid fever.

It may, then, localize itself in different organs, and from the various localizations may arise clinical varieties, singularly distinct from the classical ones. There may even exist cases so irregular that the diagnosis can only be established by bacteriological exploration of the spleen and other organs —*L'Union Med.*

Signs of Death.

Richardson gives the following signs of death:

1. Cessation of respiration, which possesses only a relative importance.

2. Disappearance of the pulse and the heart sounds. This sign is also not constant. For the circulation may be excessively feeble and still suffice for maintaining life for a certain time.

3. The absence of swelling of the veins after applying a cord over the back of the wrist.

4. Lowering of temperature. Persons have survived who have had a rectal temperature of 33°.

5. The cadaveric rigidity is one of the best signs of death. It must not be confounded with rigidity from cold or tetanus.

6. Coagulation of the blood. When the blood is found coagulated in two or three veins, it is a sure sign of death.

7. Decomposition. This must attain a certain degree, in order to be considered as an absolutely sure sign. A slight odor of putrefaction is not sufficient.

8. Flaccidity of the globe of the eye with opacity of the cornea is a certain sign. It is retarded by cold and the ingestion of large amounts of alcohol shortly before death. In case of doubt it is necessary to place the cadaver in a chamber heated to 30°. In this manner decomposition is favored.

9. The absence of transparency of the interdigital folds does not prove much.

10. Disappearance of electric excitability may serve as an accessory sign.

11. The appearance of a brownish spot after the injection of ammoniac under the skin is an excellent sign. One gramme of ammoniac is used. If life is not as yet quite extinct, this injection produces an erythematous spot of a wine red color. When, however, instead, there appears, five hours or more after death, a brown spot, one may be certain that death is real.

12. The sign of Cloquet. A needle which has been plunged into the tissues is drawn out and suspended in the air. If it promptly becomes covered with rust, the body was not dead. This is a sign of small value, for lactic acid, which forms in muscles shortly after death may determine the appearance of rust.

The above enumeration of Richardson lacks the signs drawn from the state of the pupil after the application of atropia.

The sign of Cloquet has been particularly studied by Labord, who twenty years ago constructed a small apparatus for the purpose of giving simultaneously the three signs, namely: oxydation of the needle, the state of the intra-muscular temperature and the electro-capillary current. The name of instrument is thermo necrometer.

As to the cause of error which Richardson says arises through the production of lactic acid in the tissues, it is not real. This is proved by the researches of Laborde.—*La Tribune Med.*

Nitrate of Cocaine in Genito-Urinary Affections.

Lavaux reports that in many cases where he wished to employ nitrate of silver (which he considers very useful in genito-urinary therapeutics) he was forced to reonunce it on account of too great reaction or too great pain following its use.

He had in vain attempted local anæsthesia by the injection of hydrochlorate of cocaine, when the idea occurred to him to try nitrate of cocaine, and now he recommends the latter for the production of preliminary anæsthesia in all cases in which it is desirable to apply nitrate of silver to the urinary mucous membrane.

As this salt is not found in commerce, and, moreover, does not keep well in solution, it must be prepared at the moment when it is needed. The process is as follows:

Take G. 0.95 of crystallized nitrate of silver and G. 2.00 of hydrochlorate of cocaine, each dissolved in 10 cc. of distilled water. Mix the two solutions and filter. The precipitate will consist of the chloride of silver and the filtrate will be the nitrate of cocaine ready for use.—*L'Union Med.*

Caustic Paste for the Removal of Epithelioma. —At a recent meeting of the New York Dermatological Society (*Jour. of Cut. and Gen.-Urin. Diseases*, February, 1890) Dr. Lewis presented a case which had been satisfactorily treated by means of the following elaborate paste, which was first described by Dr. Bougard, of Brussels:

℞	Wheat flour,	Parts, 60.
	Starch,	Parts, 60.
	Arsenic,	Parts, 1.
	Cinnabar,	Parts, 5.
	Ammonium chloride,	Parts, 5.
	Mercuric chloride,	Parts, 0.5.
	Sat. sol. of zinc chlor.,	Parts, 245.

The first six ingredients are separately ground to a fine powder and mixed in a mortar. The zinc chloride solution is then slowly added while the contents are rapidly stirred. The soft mass is then poured into an earthen pot, and, if covered, will keep in good condition for months.

In the case reported the outer horny covering of the epithelioma was first removed with liquor potassa; the paste was then applied and allowed to remain for thirty hours, after which poultices were applied for three days. At the end of that time the slough came away, leaving a healthy granulating surface.—*Med News.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, JULY 12, 1890.

TAMPONADE OF THE UTERUS.

The proposal of tamponning the uterus in cases of post-partum hæmorrhage from atony of that organ is not a new one by any means, and of late years has been repeatedly brought forward by Dührssen. He has reported cases which go to show that tamponning the uterus with iodoform gauze is a measure which is deserving of wider practice and greater confidence. Since then cases have been reported by various men in which this plan clearly entitled itself to the name of a life-saving measure. Dr. H. Born, Breslau, reports successful cases of this kind which occurred at the clinic in Breslau (*Deutsch Med. Woch.—Centr. f. Gyn.*) and Dr. Eckertson reports four cases which occurred at the Konigsberg Clinic, (*Centralb. f. Gyn.*), making ten cases which testify to the value of this method.

The *a priori* view of the matter, as taken by many, that tamponade of the uterus is an impossible procedure, since in hæmorrhage from atony it would attain its previous dimensions, has been shown to be unjustified by the facts. Even in marked atony, the insertion of gauze exercises such a mechanical irritation that on the introduction of a mass of gauze of moderate size, the uterus contracts firmly, and in this way the hæmorrhage is brought to an end.

THE ANALINE COLORS AS ANTISEPTICS.

It is not a new thing, the knowledge that bacteria and the organisms of mold take up the aniline colors quickly and freely, and that the organisms with power of motion become quiet soon after imbibing this stain. Prof. Stilling, Strasburg, (*Wiln. klin. woch.—Med. Chir. Rund.*) in an endeavor to make practical use of the circumstance, instituted control-experiments, with many kinds of organisms, and soon found that certain degrees only of concentration of the coloring fluid were effective. Those parts of culture fields which were sprinkled with the coloring fluid were avoided altogether by the organisms, but the rest of the field was entirely taken up by them. Solutions of the strength of 1 in 30,000 show the growth of the germs, while those of 1 in 50,000 stop all development and all decomposition. The violet colored (gentian, methyl, violet,) have the most intense anti-bacterial influence. Administration of the substances by the mouth, and their subcutaneous injection in animals are followed by no bad results; 20 c.m. of a 1–1000 solution had no influence upon a rabbit, but 10 c.m. of the same strength injected into the peritoneal cavity proved fatal.

Proceeding further with his experiments, Stilling took men for subjects, and at first those suffering with eye affections. He states that he attained most excellent results in scrofulous ulcers of the cornea, blepharitis, conjunctivitis, phlyctenulæ, etc.; he also saw good results in keratitis, parenchymatous iritis, and even in an advanced and apparently hopeless case of sympathetic ophthalmia. He employed the aniline colors in various surgical cases, also with good results. The disadvantage of this treatment is, as may be imagined, the color, which also gives an unsightly appearace to the hand of the person using it. This color, however is easily removed by washing in javelle water or tincture of soap. The article is now manufactured by Merck, free of arsenic and phenol.

Gauze, cotton, and silk may be used, impregnated with a 1–1000 solution, and either blue or yellow in color. There are aniline pencils and powdered aniline for dusting purposes, (either 2% or 1%, the latter for ophthalmological use), solutions and ointments. This is the substance to which we referred some time ago in this journal in a short item. It is known as pyoctanin, and a yellow as well as a blue prepartion is now on the market.

INGERSOLL ON VIVISECTION.

We see by a recent issue of the *Medical Record* that Colonel Robert Ingersoll has broken out in a new place. Resting after his attacks upon religious faith, he perceives another opening and takes up the cudgel as an anti vivisectionist. This will be disquieting news to many of his admirers, and it is to be hoped that it will not lead to comment of the same character as that which attended the advent of Brown-Sequard's marvelous "elixir," to the effect that the great physiologist was in his dotage, etc.

The doubting Colonel, in a letter to a Boston gentleman, calls vivisectionists "scientific assassins," "criminals," and "torturers;" he indulges in a rather nonsensical diatribe, from which the following extracts are

taken; not the least remarkable is the dogmatism displayed in the first few sentences:

"I know that good for the human race can never be accomplished by torture. I also know that all that has been ascertained by vivisection could have been done by the dissection of the dead, or, at least, of animals completely and perfectly under the merciful influence of ether. I know that all the torture has been useless All the agony inflicted has simply hardened the hearts of the criminals without enlightening their minds.

"Never can I be the friend of one who vivisects his fellow-creatures. I do not wish to touch his hand. When the angel of pity is driven from the heart, when the fountain of tears is dry, the soul becomes a serpent crawling in the sand of the desert.

"The wretches who commit these infamous crimes pretend that they are working for the good of man, that they are actuated by philanthropy, and that their pity for the sufferings of the human race drive out all pity for the animals. They slowly torture them to death, but those who are incapable of pitying animals are, as a matter of fact, incapable of pitying man."

These quotations are well worth study, for they present a mixture of flashy rhetoric, ignorance, dogmatism, and invective that is but seldom met with.

In disproof of the statement denying any benefits from vivisection, the *Record* says: "The discovery of the circulation of the blood, of functions of the spinal nerve, of the action of galvanic currents, of the localization of brain functions, the use of the ligature, the discovery of the bacterial causation of disease and the modes of prevention, the methods of inoculations against rabies and anthrax, the improvement in surgical methods, the action of many important drugs have been learned through vivisection."

Further comment can be supplied by the reader.

Alcoholism and Insanity.

Henri de Parville gives an interesting contribution to the study of alcoholism and insanity[1]. It embraces a collection of statistics which bear upon the increase in the number of insane people in France since 1882. He bases these figures chiefly upon the evidence obtained in the division for the sick of the police prefecture, to which all persons arrested upon the street are taken. According to these statistics insanity has been increased by 30%, as shown by the following figures:

	MALE.	FEMALE.	TOTAL.
1872	1695	1389	3084
1876	1782	1448	3230
1880	1932	1552	3484
1884	2313	1813	4126
1888	2549	1900	4449

De Parville goes on to say: "It is clear that, if things were to continue so, all humanity would finally become insane; 30% in less than sixteen years. According to the investigations, insanity affects more men than women, 55% against 44%, and the increase of cases is to be assigned chiefly to alcoholism and general paralysis. The number of cases of monomania, melancholia and chronic insanity remains stationary, and these occur twice as frequently in women as in men. The increase of insanity must be ascribed, in Paris, and probably throughout the country, primarily to alcoholism, and next to mental overexertion and the struggle for existence. Alcoholic insanity has increased in terrible proportions; the number of cases has doubled in fifteen years, and from 1886 to 1888 alone the number of incarcerations has increased by 25%.

Among the female sex, too, alcoholism has increased to an alarming extent. In 1872 the average number of men observed with delirium tremens was 314.66; of women, 52.56.

The present averages are 602.33 for men and 125.33. More than this, the cases of delirium tremens seem to be increasing in severity, and lead to homicidal attacks. The cases of general paralysis have also more than doubled in number since 1874. During that year 174 were received, in 1888, 354 cases, and these, too, must be attributed to the excessive use of alcoholic stimulants, rather than to excessive mental exertion.

[1]Jour. des Debates—Med. Chir. Rundsch.

MEDICAL ITEMS.

Dr. W. L. Blickhahn having resigned his position of Clerk of the Board of Health, Dr. Seward Finney has been appointed in his stead.

The University of Halle now has its Hygienic Institute, with suitable lecture hall and laboratories. Prof. Renk has been appointed to be its director.

The Berlin Poliklinik.—A new university Poliklinik of Orthopædic Surgery was opened at Berlin on May 22. Dr. Julius Wolff has been appointed chief surgeon to the institution.

Late Child Bearing.—Dr. E. F. Parsons, of Thompsonville, Conn., reports the case of a lady who was married at the age of 50 years, and gave birth to a female child after she was 51 years old.

Suicides in Berlin.—During the month of January there were seventy-five suicides (fifty-three men, twelve women, and ten children) in Berlin. This is said to be the largest number ever reported there during a single month.

Boston's Streets.—A petition signed by over one hundred physicians of Boston was recently submitted to the City Council, protesting against the filthy condition of the streets, and urging immediate remedy before the advent of hot weather.

A Physician Sues for Damages.—Dr. J. R. Partenheimer was called to a patient at Ardmore, who sent his carriage to bring the doctor from the station to his residence. The horses ran off, and the doctor was severely injured. For this he sues the patient for $25,000.

A Reading Room at Berlin.—A reading room is to be established in connection with the Tenth International Congress for the benefit of its members. The current medical literature will thus be at command, and medical men from every section of the world can there review their home journals.

The Fiske Prize Fund.—A prize of $300 has been awarded to Dr. H. A. Hare and Dr. Edward Martin, of Philadelphia, under the Fiske Fund of the Rhode Island Medical Society, for an essay on the treatment of wounds and obstruction of the intestines. The subject that will be open for competition for the prize of 1891 is disease of the hip-joint.

Yellow Fever Quarantine at New Orleans.—The steamship "Adrian" recently arrived at the Lower Quarantine Station of that city laden with fruit. It is reported that on the passage from Boca del Toro the steward died of yellow fever and was buried at sea. Another case of fever of suspicious character is reported on the vessel, and the most careful surveillance will be exercised to prevent the invasion of yellow fever at that port.

Moderate Charges.—A physician of San Francisco recently sent in his bill to the estate of a rich but penurious man who had died under his care. He charged for his visits at the rate of $100 each, and the total amount of the bill was over $3,500. As the physician had some distance to go to see his patient the charges would not seem to be absurdly high, but the public administrator, nevertheless, cut down the amount to $1,100, and will resist in the courts the payment of any sum above this.

Adulteration of an Adulterant.—The United States consul at Stettin in a recent report calls attention to the adulteration of the chiccory exported from there, says the *Scientific American*. From inquiries which he made he learned that the larger part of the chiccory is made from beet roots, dried and burnt or roasted, and prepared in the same manner as pure chiccory. The mixture usually sold as chiccory is composed of one-third of the pure article and two-thirds of roasted beet roots. It is invoiced at about 1½d. per pound, a price at which it is quite impossible to get genuine chiccory. —*Diet. Gaz.*

Large Russian Surgical Fees.—Dr. Sklifissowsky, of Moscow, having been called to Odessa to operate upon a case of hip disease, was presented with an honorarium of 11,000 roubles, or the value of £1,222. This is, for Russia, an enormous fee, and the surgeon, with remarkable generosity, passed it over untouched to the University of Odessa, to found a medical scholarship. He also was called upon, incidentally to his other consultations, to operate upon a cancer of the breast, for which he received 2,000 roubles. These large fees are for the elect only, the average Russian medical man being very poorly paid.

The Chair of Pharmacology in Bern.—Dr. Tschirch, private lecturer in the Berlin University, has been appointed professor of pharmacology in Bern. He was originally an apothecary, and afterward devoted himself chiefly to botany. His special field is the chemical physiology of plants, and the main theme of his investigations has been the structure and qualities of chlorophyll. Along with Friedrich Fluckiger he has written a hand-book of pharmacology, and is now writing a hand-book of the anatomy of plants. With the help of funds granted by the Berlin University he made a journey of research in the tropics about a year ago.—*Lancet.*

Erysipelas Treated by Warm Water.—Rose (*Ther. Gaz.*) describes a case in which this method was employed. The patient had erysipelas of the hand and fore-arm, with incipient gangrene of the fingers from tension. The arm was placed in a warm bath as far as the erysipelas extended. On the next day the fever and pain had subsided, the appetite returned, and the erysipelas practically gone. The author adds: "The warm bath relieves pain most wonderfully. I cannot understand why so many means and methods of treatment are recommended against burns and the effects of freezing, while in the warm bath we possess the very ideal means against these troubles of whatever degree and extent.—*Times and Reg.*

"Provings."—Not long since, while reading a history of "provings" of nux vomica, we learned that the patient was despondent and buoyant alternately, and that he had a desire to talk about his condition. Constipation and an occasional sticking pain in the right ear and a sensitiveness of strong odors were also noticed. He had pimples on his chin, and his dreams were full of bustle and anxiety. On going upstairs he was anxious to get to the top. As we had previously observed that the same symptoms followed the use of pumpkin pie, with the exception that the patient tripped up on a dust pan on the last stair when going down, it occurred to us that pumpkin pie should be added to the pharmacopœia.—*New England Medical Monthly.*

Hysterical Perversion of Sensibility.—The *Recorder* for May has an account of an unusual case of hysterical sensory perversion, quoted from a recent clinic of Professor Leyden, of the Berlin Charite Hospital. The professor exhibited to his class the case of

a young woman belonging to that class of hysterical persons who manifest an abnormal desire to have surgical operations, even of the most painful character, performed on them without any anæsthetic being used. These persons, according to Dr. Leyden, not only do not experience pain, or they will so acknowledge it, but, on the contrary, that which in others produces all the accompaniments of pain, produces in them pleasurable sensation. The young lady shown to the class was one who during a hysterical attack fell and injured her face, severing the facial artery and fracturing the lower jaw. The wound was sufficiently serious to require the deligation of both the facial and carotid arteries, besides the removal of a portion of the broken jaw. The patient readily submitted to the operations, but insisted on having them done without any anæsthetic. And she afterwards assured the surgeon that she experienced no pain, but rather great pleasure during the performance of the operation.—*Jour. A. M. A.*

SOCIETY PROCEEDINGS.

TRANSACTIONS OF THE GYNECOLOGICAL SOCIETY OF CHICAGO.

Regular meeting, February 21, 1890, the President, James H. Etheridge, in the chair.

The Cure of Cystocele by Inguinal Suspension of the Bladder; Colpocystorrhaphy.

Dr. Henry T. Byford.—The cure of cystocele by plastic operations upon the vagina is so often imperfect that a more efficient method would seem desirable. Acting in accordance with the fact that the pelvic viscera have two kinds of support—(1) the *sustaining*, composed of their surrounding connective tissue and peritoneal folds, and (2) the *retaining*, comprising the pelvic walls and floor—I have adopted a procedure that enables me to strengthen both of these varieties.

In the *North American Practitioner* of June, 1889, was reported a case of protrusion of the bladder and virgin uterus for which I cut down into the inguinal canals (February 13, 1889,) thence through the posterior walls of the latter into the paravesical (post pubic) cellular tissue, and stitched this tissue and the fibrous coat of the vagina at either side of the urethra to the incision in the walls of the canals. On the same occasion I performed Alexander's operation and tamponed the vagina. Three weeks afterward (March 6) I did Martin's posterior elytrorrhaphy and perineorrhaphy. The patient went home in a month (April 3) apparently well and sound. However, in about three months the anterior vaginal wall began to protrude, and now protrudes to a slight extent, although the uterus is still held in almost a normal position in the pelvis. The inguinal suspension was a failure, partly because I had not sufficiently secured the vaginal walls, and partly because of malignant pelvic disease.

I operated similarly June 1, 1889, for cystocele, but included the entire thickness of the vaginal walls in the suture. At the same sitting I performed Martin's posterior double elytrorrhaphy and perineorrhaphy. As the patient remains cured, the case seems worth recording:

Mrs. G., æt 57 years, came to me in April, 1888, suffering with an adeno-carcinoma of the corpus uteri and a large cystocele. The uterus was removed March 4, and the vagina tamponed in position. When she began to walk, the bladder again protruded, and the accompanying symptoms soon became intolerable, worse than before operation. Accordingly, June 1, 1888, in the presence of Drs. H. P. Merriman, W. W. Jaggard, Agnes Eichelberger, Jessie B. Brown, and Isabel Taylor, I cut down into the left inguinal canal and from there into the post-pubic cellular tissue. After separating this tissue from the pubes and locating the ureter bimanually, I passed a needle armed with silkworm gut from above down through the anterior vaginal wall at the left sulcus. From below I again passed the needle upward through the vaginal wall about one-quarter of an inch from the first puncture, and pulled the silkworm gut up, so that I held both ends at the inguinal opening, with a portion of the anterior vaginal wall included in the loop. Another suture was made to grasp deeply into the cellular tissue. Both threads were now drawn tight and tied to the inguinal canal in such a way as to close the incision of its posterior wall. The left anterior vaginal wall was thus drawn almost half-way up the posterior surface of the body of the pubic bone. As the patient was not in a good physical condition, I did not operate upon the other side, but contented myself with Martin's operation upon the posterior vaginal wall and perineum. Plain vaginal douches were given for two days each time she urinated or was catheterized, and 1% carbolated douches after that. The wounds healed by first intention. The silkworm gut soon cut its way through the vaginal wall and has not since been heard from. At the present time the vulvo-vaginal entrance is small, and the urethra and anterior vaginal wall are held well up behind the pubic arch. The symptoms are relieved, and the patient, for the first time in many months, is able to walk the streets comfortably.

Just as Alexander's operation is useful in connection with the necessary plastic operations upon the pelvic floor and perineum, in cases of procidentia uteri, so is inguinal suspension of the bladder (colpo cystorrhaphy) indicated in bad cases of cystocele to supplement the same operations. Its performance as an addition to Alexander's operation involves but little extra time or traumatism.

The cases reported teach that the suspension sutures should always include some vaginal mucous membrane, in order that they may cut through the tissues as slowly as possible, and thus give the cellular tissue time to adhere firmly to its new position behind the pubes and under the inguinal canal, and to cicatrize firmly under and about the receding loop of silkworm gut.

When both sides are operated upon, care must be taken not to place the suspension sutures too near the urethra, for fear the passage of the urine might be impeded.

A Fibroid Tumor of the Uterus Complicated with an Ovarian Tumor; Operation; Complete Removal of the Uterus; Recovery.

Dr. H. P. Merriman.—Miss De G., æt. 51 years, of good health previously, came to the Presbyterian Hospital with the following history. She had first noticed a swelling in her abdomen in the summer of 1889, which rapidly increased in size and became very painful. Her physician, she said, told her he feared that the tumor was malignant.

On examination, inspection showed an irregular outline, more prominent on the left side of the abdomen, which was hard and not fluctuating. On the right side fluctuation could be detected. With finger in the vagina the os could be reached with difficulty by pressing down the tumor on the left side. In the cul de-sac of Douglas a fluctuating mass was found, which was in creased by pressure on the right side of the abdomen. Examination by rectum revealed no new facts. The whole examination was very painful to the patient.

Diagnosis.—An ovarian tumor on the right side, and on the left a tumor of the uterus, character unknown, but sarcoma feared on account of the rapid growth.

The patient said she was suffering so severely that she wished the tumor removed if there were only one chance in a thousand for her recovery.

Operation.—Feb. 10, 1890. Present, Drs. Etheridge, Nelson, Knox, Parks, Graham, Bridge and Stehman. Incision made in the median line from above the umbilicus nearly to the symphysis. On opening the abdomen the uterine tumor was first seen, but was movable, with slight adhesions. On pressing it to the left the ovarian tumor was seen to the right of it and behind it. This was removed without difficulty in the usual way, and the uterine tumor lifted out of the abdomen. It was found to be a fibro-myoma. It was determined to remove it. The bladder was first dissected off by the handle of the scalpel and by the fingers until the operator could feel the finger of his assistant, which was thrust up the vagina to the os.

The broad ligament on each side was then ligated by successive stitches (care was taken to avoid the ureters) and, clamp forceps being placed close to the tumor, the broad ligament was divided down to the cervix and the whole uterus dissected out as complately as in vaginal hysterectomy; the vagina being amputated close to the os.

All bleeding points were carefully ligated and the abdomen washed out three times with boiling water for fear of infection from the vagina, which, however, had been thoroughly douched with a sublimate solution (1 to 4,000) before the operation.

The amount of blood lost during the operation was less than half a pint, being at no time sufficient to form clots in the abdomen. The abdomen was closed in the usual way, and a tampon of iodoform gauze was inserted in the vagina.

Succeeding History.—There was little nausea for the first 18 hours, but for the next 3 days it was very severe and was the chief source of distress to the patient. She complained of sinking and of some pain which was chiefly in the vicinity of the stomach and diaphragm.

The temperature remained below 99.6° until February 20, 10 days after the operation, when it suddenly went up to 102.2°, and the pulse to 120. Some pus was found coming from two of the stitch holes. The following day pulse and temperature were again normal, and did not afterwards reach 100.

There was a moderate discharge from the vagina for the whole month. On the sixth day the tampons were discontinued and daily douches ordered.

Comments.—From the position of the ovarian tumor, behind and below the fibro-myoma, the operator presumed that the apparently rapid growth of the latter was only the result of the pressure of the former in its more speedy development.

The operation was rendered less difficult by the slightness of the adhesions, and the previous good health of the patient favored recovery. [The patient left the hospital March 28, fully recovered.]

Dr. J. S. Knox.—I saw the operation and am delighted at the results. I wish to call Dr. Merriman's attention to something that will explain, perhaps, the suppuration in the track of the stitches. The doctor used an ingenious method of making the stitches. He threaded a loop, and an assistant slipped a ligature in the loop each time a stitch was made, so as to quite rapidly insert the sutures. This saved the threading of more than one needle, but there was a constant reintroduction of the loop through living tissue and blood, and subsequent contact with air that was not disinfected. I believe the ligatures used were thoroughly aseptic, and the sutures were drawn through only once, therefore I doubt if the trouble came from them.

As far as the treatment of the stump is concerned, the doctor obliterated it and there was none to care for. There is a risk in these operations, as I see by recent literature. Loops of small intestine may become adherent to the vaginal wound and obstruction of the bowels occur. In the last two months several deaths have occurred from such cause. That, I think, is the sole objection to this method of hysterectomy.

Dr. W. W. Jaggard read a paper in which he atdeavored to defend the theses:

1. There is no expectant treatment of placenta prævia. As soon as the diagnosis is established, terminate pregnancy.

2. It is the physician's duty to remain by his patient until she is delivered and out of danger.

3. The best routine treatment is that outlined by Braxton Hicks. Turn by Braxton Hicks' method, and plug the lower uterine segment with the child's body, but do not extract.

4. In lateral placenta prævia, vertex presentation, rupture the membranes, and if the hæmorrhage is not arrested apply forceps.

5. When conditions for version or forceps are absent, tampon with Braun's colpeurynter, or iodoform gauze or wicking.

[TO BE CONTINUED.]

ILLINOIS ARMY AND NAVY MEDICAL ASSOCIATION.

A meeting to organize a society of medical men now living in Illinois who served in the army or navy during the war was held at Springfield, June 26, 1890.

Thirty-five members were present, a very satisfactory attendance when the extraordinary hot weather and suspension of traffic upon one of most important railroads are taken into consideration. Among those present were:

John S. Speers,	Chicago.
A. T. Barnes,	Bloomington.
H. A. Kelso,	Paxton.
N. B. Cole,	Bloomington.
Enoch W. Moon,	Decatur.
Ira Brown,	Milford.
J. A. Hatch,	Kentland, Ind.
Philip Sieffenbacher,	Havana.
Henry W. Kendall,	Quincy.
Lyman Hall,	Champaign.
John C. Copestake,	Wyoming.
E. L. Phillips,	Galesburg.
A. M. Lackey,	Oak Park.
W. J. Chenoweth,	Decatur.
Z. P. Hanson,	Chicago.
S. J. Bumstead,	Decatur.
A. B. Agnew,	Samoth.
W. C. Day,	Winchester.
Ira N. Barnes,	Decatur.
Jas. Miner,	Venedy.
Edwin Gaylord,	Magnolia.
Z. S. French,	Sumner.
John H. Rauch,	Chicago.
J. S. Hughes,	Springfield.
Edmund Andrews,	Chicago.
J. L. Wilcox,	Springfield.
F. S. Matthews,	Springfield.
H. B. Buck,	Springfield.
Jos. Pogue,	Edwardsville.
A. F. Bartlett,	Virden.
D. L. Spaulding,	Virden.
Edward P. Bartlett,	Springfield.
T. P. Yerkes,	Upper Alton.
E. Gurlick,	Alton.
Chas. Kerr,	Springfield.

Dr. Rauch called the meeting to order at 10 o'clock, was made temporary chairman, and Dr. Starkweather temporary secretary. Prayer was offered by the chaplain, Reverend Francis Springer.

The object of formation of this association was stated, and letters read from over one hundred medical men, heartily approving of same, and promising to cooperate in making the movement a success.

A committee on permanent organization was appointed, consisting of

Dr. J. H. Rauch,	Chicago.
Dr. W. J. Chenoweth,	Decatur.
Dr. H. W. Kendall,	Quincy.
Dr. R. M. Lackey,	Chicago.
Dr. N. B. Cole,	Bloomington.

AFTERNOON SESSION.

Report upon organization was received. The object of the association was defined to be the promotion of social and historical purposes, and the discussion of medical subjects connected with the late war.

The officers consist of one president, five vice-presidents, treasurer, secretary and one from each congressional district, who shall constitute a historical committee. This committee, in connection with the officers, shall constitute the Executive Committee.

The membership fee was placed at $2.00 per year, power given to the executive committee to increase the amount if deemed necessary.

The meetings are to be held annually at such time and place as may be determined by the association or executive committee. In regard to elligibility, membership was extended to (1), all reputable physicians now living in Illinois, whether in practice or not, who served in the army or navy during the late war, regardless of the State from which they came; (2), all who were surgeons or acting assistant surgeons who were with Illinois troops and now non-residents of the State.

This report, and purposes of organization, were discussed by Drs. Barnes, Chenoweth, Andrews, Kendall, Johnson, Agnew, Hughes, French, Buck, Hall, Kelso, Copestake, Keer, Wilcox and others.

Drs. E. L. Phillips, John C. Copestake and H. A. Kelso were appointed a committee on nominations, and reported the following, who were duly elected to serve for one year:

President, Dr. H. A. Johnson, Chicago; Vice-Presidents, Dr. A. F. Barnes, Bloomington, Dr. H. W. Kendall, Quincy, Dr. Ira Brown, Milford, Dr. A. B. Agnew, Samoth and Dr. E. Guelick, Alton; Treasurer, E. W. J. Chenoweth, Decatur; Secretary, Dr. J. H. Rauch, Chicago.

The day was very profitably spent socially, and in addresses and interchange of reminiscences of experiences of army life. The chief object of the association is to gather up and preserve correctly the military history of members. It is proposed to collect and publish a biographical sketch of each medical officer, laying special stress upon his military history and experience.

This association enters upon its existenee with a membership of one hundred and twenty-seven.

SELECTIONS.

FOOD.

By LOUIS BARKAN, in "Health, and How to Preserve It."

Every article used as food is made up of organic (vegetable or animal) or of inorganic (mineral) matter, and should contain all the various constituents of the human body in such form that they may be readily changed into living flesh, bone, and other tissues. The most digestible food is that which can be easily acted upon by our digestive organs, and thence absorbed with facility by the blood. Some kinds of food are very nourishing, but very hard to digest; while, on the other hand, matter that is easily digestible is not necessarily nourishing. Digestibility is greatly influenced, also, by the manner in which food is prepared or partaken of. For instance, meat will be more easily digested when it is well cooked and thoroughly masticated. So, also, beans, lentils, and peas are more easily digested when strained. The more important articles of food are water, albuminous substances (white of egg, meat, etc.), fatty substances and carbo-hydrates (sugar, starch, etc.), table-salt, and the salts (salts are compounds, containing one or more of these substances combined with an acid) of lime, sodium, and iron. Animal substances, especially when taken in a soft, pulpy form, are more easily digestible than vegetable substances. Spices and condiments do not contribute anything toward building up the tissues of the human body; they only serve to improve the taste of the food and to promote digestion by increasing the flow of the digestive fluids.

Food is the more digestible, the more soluble it is in the digestive fluids. The latter comprise the saliva, the gastric juice, the bile, the pancreatic juice, and the intestinal secretions. Therefore, water, sugar, and the blood salts will be the most rapidly taken up into the blood; albuminous matter, if finely cut up and of soft consistency, will be more easily digested than when taken in more solid form; small pieces of fatty matter more easily than fat in large lumps; the flesh of young animals, or well cooked meat, more easily than tough meat, meat from old animals, smoked or salted meat. (There is one exception: veal is digested much more slowly than beef.)

Digestion is accelerated by an increased flow of the digestive fluids. Thus, starchy substances will be better digested when the flow of saliva is increased; albuminous substances when the gastric, pancreatic and intestinal juices flow freely; while the bile, pancreatic and intestinal juices must increase in quantity for the rapid digestion of fats.

An essential point in this connection is the ability of the digestive fluids to permeate the food. Thus, if food is surrounded by some substance impermeable to aqueous liquids, as, for instance, fatty matter or the skin of certain vegetables, it is difficult of digestion. Porous matter is digested much more quickly than more compact substances. It is for this reason that bread which has not raised well is harder to digest than when properly raised, hard cheese is more difficult of digestion than soft cheese, fat and greasy food than moderately fat food, and food incompletely chewed than that which has been thoroughly masticated. Food, furthermore, is easier to digest the more nearly it resembles in its composition the components of the human body: therefore animal is more easily digestible than vegetable food.

Those races which live on vegetable diet principally are not powerful, but are of a mild disposition and apt to become enslaved, while races which prefer an animal diet are warlike and jealous of their liberty. History teaches us beyond contravention that those nations which have accomplished most in the course of time are those which have lived upon a mixed diet. Life in the temperate zone, in which the races most advanced in civilization dwell, peremptorily demands a mixed diet; agriculture and the tending of cattle are both favored by its conditions. In hot climates, on the other hand, a vegetable diet is preferable; while in the frigid zone animal diet is the most suitable.

What to do before or after a meal is a question of great importance so far as digestion is concerned. Thus, it is advisable to shun bodily or mental exertion immediately before eating, and weak and anæmic persons may even take a short nap with advantage just before sitting down to table.

The table should be set in a light, airy room, moderately heated, while the mental atmosphere should be one of quiet and happy relaxation. No pressure should be allowed, over the region of the stomach especially, from tight lacing, belts, or other constrictions. Solid food, meat particularly, should be cut up into small pieces and well masticated. It is best to eat slowly, and to drink now and then, as required. Drinking during meals is hurtful only when too much liquid is taken, or when fluids are drunk along with fatty substances.

Digestion is promoted by the use of condiments and mild stimulants, such as tea and certain kinds of wine, in moderate quantities. Clarets, genuine sherry and genuine port wine contain the mineral salts of the blood in proper proportions; they are therefore not only stimulants, but actually nutritious. If taken in excess, however, they inevitably prove injurious.

Warm meals are as a rule easier to digest than cold ones, but extremes must be avoided. Too hot or too cold substances are always injurious to the stomach, alternation between the two especially so.

A short nap after meals is strongly to be advised; bodily or mental exertion, at least, should never be attempted at this time. Professor Hyrtl has proved that the old view, according to which bodily exercise was recommended to follow eating, is erroneous. He fed two dogs of equal development with equal quantities of the same kind of food, and found, upon making autopsies, that the dog which had remained quietly at home

had digested his meal much better than the one which had been on a lively run for several hours succeeding the meal.

This after-dinner nap is especially to be recommended to persons who have been very active up to meal time, and also to those suffering from anæmia or nervousness. It should not last longer, however, than from half an hour to an hour; sleeping too long will retard digestion. For the latter reason it is not advisable for those who live a sedentary life to partake of a full meal shortly before retiring for the night. Sleeping too long with a full stomach, aside from the above considerations, frequently proves disagreeable by causing bad dreams and a feeling of oppression.

The number of meals and the selection of foods must be determined with a view to such considerations as the age, the sex, and the constitution of the individual, the state of his health, his mode of life, the climate in which he lives, the season of the year, and the time of the day. It must not be assumed that a single article of food, not even milk, will suffice for every constitution, every age, and every occupation; this is not to be thought of. The kind of food must change with the systemic condition of the individual.

In general, experience and habit will enable us to determine what kinds of food and drink will best agree with us. During the period of growth, a process dependent upon the new formation of tissues in excess of the tissue waste which is constantly going on, the child needs a very nutritious, but mild, non-stimulating diet. At this age, meat and fats are especially suitable. In adult life, when there is an equilibrium established between waste and supply, the diet must be regulated accordingly. In advanced life, when waste is in excess, a light diet of easily digestible and slightly stimulating food is indicated.

The cost of food is not always in proportion to its nutritive value. The earlier fruits and vegetables of the season do not possess great nutritive value in spite of their high price. On the contrary, they exert a harmful influence upon nutrition, especially in the case of persons with poor digestion, since they exclude more desirable food from the stomach. On the other hand there are many articles of diet of great nutritive value which are comparatively cheap, such as eggs (in summer especially,) milk, leguminous vegetables (dried peas, beans, and lentils,) certain kinds of fish, and certain portions of animal food (the kidney, the liver, the marrow, the sweetbread.)

In some countries, as in America, fishes' heads are given or thrown away, while elsewhere they are considered a delicacy. In the same way fish roes, which are very nutritious, are mostly neglected, while in Austria they are utilized in the preparation of an agreeable bitter soup. In Austria, Southern Germany, France, and Switzerland good prices are paid for the spleen, the brain, the lungs, and the udder of the cow, while in the northern countries of Europe these portions of the animal are not partaken of, even among the poor. Leguminous vegetables are used as an article of food very generally throughout Europe, while in our country they form a less frequent article of fare—a fact, not at all to our advantage. Jews and Mohammedans are very fond of calf's and sheep's pluck and of tripe, viands of which Christian peoples make little use.

Still wider divergencies exist in the matter of taste, as we may see from the following list of extraordinary nutriments:

The Patagonians in South America and the Kirghis and other races in Central Asia prefer horse flesh to any other. That which they enjoy tastes, of course, much better, and is far more tender than that to which the poor in European cities are accustomed, inasmuch as they choose younger animals for slaughter. It may not come amiss to remark here that in time of war, when provisions are frequently to be obtained only with the greatest difficulty, the flesh of horses killed in action might be advantageously utilized as food for the soldiers.

Italians, it is said, hold cat meat in high esteem; and many persons, not improbably, are accustomed to partake of our feline pet under the guise of roasted hare, more especially in such larger cities of the Continent as Paris and Vienna.

The Chinese are given to fattening dogs for their table; they dote on shark's fins and rat stew. In some tropical and sub-tropical countries, monkeys, lizards and snakes are considered delicacies, even by Europeans, living there; and among the civilized notions of Europe and America there are some gourmands who like to see young crows, frogs and snails on their bill of fare. Soup of may-bugs, old Gorgonzola (cheese swarming with mites), and even skunks are enjoyed by some. The latter, of course, must be killed unawares. The Abyssinians cut a steak from the living ox, whose wound, immediately covered again by the skin previously reflected, heals rapidly in the pure atmosphere of the high plateaus. In Africa, the fair young belles of the Gallas tribe tie a silken thread about a cow's neck, puncture one of the swollen veins, collect the blood in vessels, and offer it while still warm for the refreshment of their swains. The Chinese prefer eggs containing a partly batched chicken. Arabs and Indians like fried locusts. The Botocudes on the banks of the Amazon swallow caterpillars, ants and their eggs, or rather chrysalises, as delicacies. The Otomakes of the Orinoco eat a certain kind of earth or clay, probably impregnated with organic matter. The Esquimaux cut off comfortable strips from a seal, and with matrimonial tenderness assist its ingestion by alternately pushing the pieces down one another's throats, finishing the meal with a copious draught of whale oil.

In reading of these strange preferences we may smile or shudder, as the case may be; and yet it is all a matter of habit in educating the taste in certain directions, which we are apt to call perverse, because they are not quite in accordance with our own taste. This is best illustrated by the fact that some articles of our diet are

shunned by other races. Thus, it is reported that the Garrows and the Nogas, some semi-civilized tribes in Farther India, and also the inhabitants of Cochin-China, detest the milk of animals as an article of food, and deem it absolutely impure. The Kffiars avoid fish, the Hindoos fish and meat; and two hundred and fifty millions of Mohammedans, as well as ten millions of Jews and at least forty millions of other people, belonging to various races and religious sects, refuse pork or meat of every kind.

If too much food is ingested, it is of importance whether this happens only occasionally or whether it is done frequently and repeatedly. In the latter case the polyphagia, or over-feeding, may become a habit. This, in turn, will cause derangement of the digestive organs, if the food is hard to digest. Such troubles are principally referable to the liver in consequence of stagnation of the blood in the portal system. Piles are also produced by the same cause. Some of the ill effects of over-feeding may be counteracted, to a certain extent, by exercise in the open air.

The temperature of the food is of great importance. Although the effects of smoking viands may be modified in some degree by eating bread, especially stale dry bread, between times, it is best not to partake of very hot or very cold substances, for these are liable to cause inflammation of the mucous mhmbrane of the mouth, throat, œsophagus, and stomach, or even dangerous and lasting contraction of some portion of the alimentary tract. The teeth also suffer severely from the same cause. It is not wise to add irritating substances, such as strong spices, in large quantities to the food; nor should strong liquors be consumed during the meal, if at all, inasmuch as they injure the stomach and impair digestion for a long time afterward, and the habit of their use, if persisted in, leads to organic disease of the stomach, the liver, and the digestive organs generally.

Preparation of Food.—Aside from its natural condition, the digestibility and the savouriness of food is greatly influenced by the manner of its preparation. If fruits or vegetables are to be eaten raw, they should be ripe, verging toward fermentation. If cooked, ripeness is not essential, because cooking or steaming, when thoroughly performed, amounts in a certain sense to artificial ripening. Vegetables which are insufficiently boiled in salted water, according to the English and American custom, have hardly any nutritive value. In order, for instance, to render beets and carrots digestible, nutritious, and at the same time delicious, they must be thoroughly boiled or steamed in true Continental style, that is, for a long time, and with the addition of butter or lard, parsley, or other condiments, or better still, together with a nice piece of meat, preferably lamb or mutton. The same is true of the condition in which meat should be considered fit for cooking. Ripeness bordering on fermentation is obtained by exposing meat for several days to the air, and especially to the crisp air of winter. The savouriness of game, in particular, is greatly enhanced by this means.

When the process of fermentation is carried too far in cereals, light or heavy spirits result, while the checking of this process at a proper time develops all the constituents of the grain to their highest degree of nutritive value, as we find in malt extracts. Almost every country has its peculiar drinks as well as its peculiar cookery. The South Americans like their "pulque," the southern Slavs their plum spirits, the Russian peasantry a common soup called "borsts," which is a very mild and agreeable product of the fermentation of cabbage, beets, or bran.

As many a genial mind lives in obscurity, so also many culinary arts and specialties thrive for a long time unthought of and unknown by the more civilized nations. Thus, the inhabitants of the Balkans do not know that they possess delicious wines, and that they understand how to cook cabbage, rice, and beans in an incomparable manner. On the other hand the Morlaks and Dalmations of the mountains do not dream that they commit an offense against the æsthetic sensibility of a refined palate, when they bury milk in a pit for the purpose of allowing it to become cheese.

[TO BE CONTINUED.]

THE TREATMENT OF BRIGHT'S DISEASE.

At the recent Medical Congress held in Vienna a discussion as to the treatment of Bright's disease was opened by Prof. Senator, of Berlin, who, under the name of chronic nephritis, stated that he had reference to all diffuse inflammatory alteration of the renal apparatus which was to be recognized by the presence of albumen in the urine, and lasting in general from one to seven months (*La Médecine Moderne*, May 1, 1890).

This division, the most comprehensive possible, proves that the forms of Bright's disease are almost infinite; for in this diffuse inflammation of the kidneys certain lesions may predominate, and this imparts to the nephritis certain special clinical symptoms. Nevertheless, there are two principle forms which should be recognized—chronic parenchymatous nephritis, or the large white kidney, where the lesions are localized in the epithelium of the urinary tubes; second, interstitial nephritis or the small granular kidney, which is slower in its development than the parenchymatous nephritis, and is characterized by the production of connective tissue and consecutive cicatrical contraction of the kidney. The progress of this form of nephritis is especially insidious, but these two forms of nephritis have determining causes, and the hope naturally suggests itself that in the treatment of these causes one may cure or even prevent the evolution of chronic Bright's disease. Prof. Senator, however, believes that this can be rarely possible, and, even where cases of acute nephritis are apparently cured, it should be remembered that in the great majority of cases chronic nephritis will result, so that even when nephritic cases have been apparently cured, the urine should be con-

stantly examined, and measures be taken to prevent the danger of chronic nephritis. Passing in review the presumed causes of chronic nephritis, it is found that cold or chilling of the body, especially when slow and prolonged and when accompanied by dampness, are the most frequent causes. Then come the constitutional diseases, such as syphilis, malaria, alcoholism, tobaccoism, lead-poisoning, and diabetes; so also pregnancy and other forms of renal congestion may likewise lead to the production of chronic Bright's disease. In all of these cases it must be acknowledged that we are absolutely powerless, and, while their mode of action is too indeterminate to give us points in prophylaxis, they very rarely assist us in therapeutic indications. Thus, for example, in the case of syphilis, Prof. Senator states that he never dares to treat a case of syphilitic nephritis by mercurial preparations, since they have the certain effect of exaggerating the renal symptoms and of aggravating the condition of the patient instead of improving it. As a consequence, the treatment of chronic Bright's disease is confined to the treatment of symptoms, and from this point of view chronic nephritis closely resembles the acute form of renal inflammation. Here, also, as in the latter, antiphlogistics are of no value, and the kidney itself is too deeply situated to give any hope of acting directly upon it, while as regards the reflex action on the kidney it is too feeble to exercise any favorable influence on renal lesions. As a consequence, Prof. Senator cautions against the employment of cutaneous irritants as always dangerous. Then, again, we have but little in the way of medicine which acts directly on the diseased kidney. It has been said that astringents cure or give rapid diminution of albuminuria. Semmola has accepted this view, since, according to him, nephritis is due to the presence of large quantities of albumen in the blood; but he is the only one who adopts this view, and we are compelled to acknowledge that there are no remedies which cure Bright's disease. Even ichthyol, which acts so well in chronic inflammations of the skin, has no action on the inflamed kidney. But this therapeutic impotence by no means signifies that chronic Bright's disease is an affection which should be allowed to go on to its inevitable fatal termination. Nephritis may be arrested often during its progress, but this is by no means a cure—that is, the parts once affected with Bright's disease never become normal. There is in this respect a certain analogy to round ulcer of the stomach. The portion of the mucous membrane which was the seat of the ulcer is lost from a functional point of view, but the rest of the mucous membrane may substitute, by a sort of physiological compensation, the part which has been disorganized.

There is thus, as has been stated by Lecorche and Talamon, functional rather than an anatomical cure. In his own experience, Senator claims that he has cured two cases of chronic Bright's disease after two years of treatment, while Johnson has cured two cases after a duration of three years.

The principle which should govern the treatment is that of saving the organ as much as possible, as by restricting its activity one aids greatly in the restoration of its physiological functions.

The renal epithelium is in part disorganized, and consequently the kidney should only be allowed to remove the amount of waste substances which may be eliminated by that portion of the renal tissue remaining unaffected. But the obliteration of the uriniferous troubles by inflammation, swelling, and desquamation determines congestion in the glomeruli of the kidney. There is thus local œdema produced, and infiltrations, which, in time, produce vascular and perivascular sclerosis; this complication is, however, not as dangerous as has been generally supposed, for if the epithelium cannot be replaced for the elimination of toxic substances, the glomeruli, nevertheless, may have their function assumed by the skin, since the function of the glomeruli is to remove water, and this is likewise possible through the skin and certain mucous membranes. Even if one could extirpate all the renal glomeruli, the skin and the bronchial and intestinal mucous membranes would suffice largely to replace them. The prevention of accumulation in the economy of toxic substances, difficult to eliminate, is therefore the first part in the treatment of chronic parenchymatous nephritis, and this is reached by suitable regulations of diet. Little albumen should be given, and larger quantities of fat and carbohydrates. Thus, in the adult, the diet should be confined to 1265 grains albumen, 480 grains fats, and 7500 grains carbohydrates, or one half the quantity of albumen may be given, provided the fats be doubled or trebled. Albumen cannot, however, be entirely left out of the diet, otherwise the digestion of carbohydrates and fats will be seriously interfered with. Of the fats which are especially readily digestible, the author gives the preference to cod-liver oil and cream. As regards albumen, the milk contains enough for the needs of the patient, and Senator confirms the general statement that milk diet is an excellent *regime* in the case of Bright's disease; but, although two to three quarts may be given a day to a patient, he does not advise the restriction of the patient to an exclusive milk diet, for the patient in time will become absolutely incapable of taking it. It is well to mix with the milk a little brandy or other substance, which may be left to the choice of the patient. Koumiss or kephir are likewise of value, particularly on account of the alcohol and lactic acid which they contain. Amylaceous substances, especially the milk of almonds, give excellent results, while meats which are poor in ptomaines, such as the white meats, fish, etc., are especially to be recommended.

Eggs may be given, since Oertel and Schreiber have determined that the ingestion of eggs does not produce albuminuria, and does not increase the albuminuria already present. Nevertheless, eggs in too large quantity are dangerous. Large quantities of liquid are to be recommended in chronic Bright's disease, but

beer, on account of its richness in extractive matters, is absolutely contraindicated. Muscular activity, leading to the production of extractive matters, which tend to accumulation in the organism, is very dangerous, and the exercise of the patient should be limited as much as possible. As regards diuretics, digitalis, strophanthus, and caffeine should be carefully watched, but may occasionally prove of service. As chronic nephritis is most often associated with general arteriosclerosis, iodide of potassium may prove of value, but the attention then should be directed towards the heart. Smoking should likewise be forbidden, for tobacco in these cases exercises a deleterious action on the cardiac blood-vessels.

In opening the discussion, Prof. Ziemssen especially emphasized the importance of the distinction drawn by Prof. Senator between the parenchymatous and the interstitial forms of nephritis as indispensable from the point of treatment.

Parenchymatous nephritis especially demands diuretic treatment, but the abuse of remedies in this form of nephritis is especially dangerous. No drugs should be used unless clearly indicated. Acetate of lead, tannin, and fuschin have been tested in the treatment of albuminuria and their inefficacy positively demonstrated. It appears that the iodide of potassium has given somewhat more favorable results, but the true treatment of albuminuria is still the milk diet joined to the most vigorous attention to hygiene. The activity of the circulation must be maintained at all price, and this may be best accomplished by baths of hot water or vapor baths, taking especial care to prevent all possible chilling of the patient. Thus warm baths taken at home, and lasting fifteen or twenty minutes, should be followed by wrapping the patient in dry sheets, with careful avoiding of any exposure to draughts. When the blood pressure is notably reduced digitalis may be employed with care. Theobromine is also of value in small doses, and it may be prescribed for a long time without any inconvenience.—*Therap. Gaz.*

NEW METHOD OF OPERATION FOR CIRCUMCISION.

I wish to describe the following method of operating for phimosis, as I find it does away with many of the unpleasant attendants on circumcision.

At the time of operation, the patient is required to wash the penis and adjacent parts, first with soap and water, than with bichloride solution (1 to 1,000); care is taken to thoroughly cleanse the mucous membrane around the corona glandis. To obtain local anæthesia, cocaine is used in the following manner: The needle of the hypodermic syringe, containing a solution of muriate of cocaine (5 grains to 100 drops of water), is introduced into the connective tissue on the dorsum of the penis, and is made to pass between the skin and mucous membrane of the foreskin, along a line corresponding to the corona glandis, until the frænum on one side is reached. The needle is now gradually withdrawn, and the cocaine is deposited as the instrument is being retracted. This process is repeated on the other side of the penis. From 15 to 20 drops of the solution are thus deposited, and a complete circle of cocainized tissue is obtained. This circle will be used as the field of operation.

A narrow rubber band (such as is used around small packages), made aseptic by the bichloride bath, is now placed around the base of the organ, to act as a tourniquet. If the band is applied before the cocaine injection, the loose skin of the penis is apt to be drawn by the band back towards the pubis; and when the cocaine is injected, the line left by the hypodermic needle will not be in the tissues overlying the corona glandis, but in the tissues of the foreskin nearer the end of the penis, and, as this line is used as the line of incision, too much foreskin will be left after the operation.

In about five minutes the full effects of the cocaine will be obtained, and the next step of the operation can be taken. The circumcision forceps is applied, and with a sharp knife the foreskin is cut off, the band of cocainized tissue being used as the line of incision. To the surprise of the patient there is no pain, and after a minute or two all bleeding stops. The anæsthesia is complete, and the hæmorrhage amounts to only a teaspoonful, consisting solely of that blood detained in the tissues by the constricting band. The forceps is removed, and the mucous membrane left by the first incision is next trimmed to the proper extent. The stitches (the finest silk, throughly aseptic, I prefer) are introduced, from four to six, as the case may require, being used. The wound is left open for a few moments, to allow the atmosphere to glaze over the raw surface, and so close all vessels likely to bleed when the tourniquet is removed. The stitches are then drawn up, the edges are approximated, and the wound is ready for the last step in the operation, namely, the application of a thick coating of *iodoform collodion*. This application is made with a camel's-hair pencil, and should extend from a half to an inch on either side of the edges of the wound. I formerly incorporated in the iodoform dressing some fibres of cotton to strengthen the dressing, but now use the iodoform collodion alone, finding that it is sufficiently strong of itself and much easier of removal. The band is removed as soon as the collodion is dry, and the operation is completed. In five or six days, when the collodion is ready to come off and the stitches are removed, it will be found that primary union has taken place.

By the above method of operating, pain is avoided without the employment of general anæsthesia; hemorrhage is reduced to a minimum; the swelling is controlled by the collodion; a thoroughly antiseptic dressing is obtained, under which primary union can take place; the patient is not troubled with any after-dressing, which foremerly he had to renew frequently, and often with soiled hands which carried germs to the

wound; the urine cannot get to wound and irritate it; and the patient is not detained from his business, but continues his daily pursuits without discomfort. After the operation I always prescribe an antaphrodisiac, either paregoric or, what I prefer,a pill of codeia sulphat., gr. j, extract. hyoscyami, gr. ss, and comphor, gr. ij, every three hours. Erections, while they are not apt to disturb the dressing are extremely uncomfortable to the patient.—H. J. Williams, M.D., in *Atlanta Med. and Surg. Jour.*

ON THE TREATMENT OF PUERPERAL HÆMORRHAGES.

BY E. P. HURD, M.D.

Post-Partum Hæmorrhages.

Post-partum hæmorrhages from retained placenta are, and ought to be, rare. The accoucheur waits a reasonable time—fifteen minutes or half an hour. If the uterus does not of itself expel the placenta, he extracts it by Crede's method, or some modification of that method. I have generally found that firm grasping of the uterus through the abdomen and kneading with the fingers, while with the other hand gentle traction is made on the cord, is sufficient. In case of rather pro fuse flooding, Crede's method, in all its essential details' should be resorted to. Unless there are adhesions, the after-birth is easily delivered in this way, and firm uterine contraction obtained. In the event of adhesions, the case may present a serious aspect. I have in my lifetime met with only two instances of what might properly be called adherent placenta. In one, the adhesions were only partial. I easily removed with the fingers (the whole hand being introduced into the womb) the greater portion of the placenta, but certain cotyledons belonging to the central portion remained behind. The uterus was kept aseptic by suitable injections, and ergot was given. On the third day the remainder of the placental mass was expelled. In the other case, which happened twenty-two years ago, the whole placenta seemed attached as by fibrous bands, and I was unable to remove any portion of it. Masses eventually separated, sloughed off, and were expelled with clots; the putridity was excessive, and it is hardly necessary to say that the patient died from septicæmia.

Post-Partum Hæmorrhage from Inertia of the Uterus.

Under this head is included hæmorrhage taking place after the placenta has been delivered. A considerable excess of flowing is not an uncommon thing, nor is this to be wondered at when we think of the extent of surface from which the placenta has just been torn by the uterine contractions, and the more or less patulous uterine sinuses. A good precautionary means, on which most obstetricians now insist, is the administra tion of a full dose of ergot just before the birth of the child. Some accoucheurs make a practice of standing over the patient, the left hand grasping the uterus though the abdominal walls, and keeping up firm compression, with frictions and kneading, for an hour, or even more. This practice, which is a good one in some cases, is really seldom necessary. A healthy woman, who has not been exhausted by her labor, will not be likely to flow too much. "The torn arterial twigs," says Lusk, "retract spontaneously, the patulous mouths of the veins become plugged with fibrinous clots, while the so-called venous sinuses, which are simply channels lined with endothelium, without valves or walls, become bent, flattened, and obliterated under the compression exerted by the muscular structures of the uterus." Sometimes, however, when we little expect it, the alarm comes, "Oh, doctor, I am flowing dreadfully!" Then is the time for prompt action. The head of the patient is to be lowerd, and the foot of the bed to be raised. A hypodermic injection of fluid extract of ergot must be administered, and repeated in ten minutes. The uterus and vagina must be cleared of clots, and hot water—as hot as can be borne: 115° to 120° F.—must be injected into the uterine cavity. There is no fear of doing harm by intrauterine injections at these times, for the water will readily run back though the patulous os. Where a fountain syringe has not been at hand, I have frequently used the Davidson syringe with the long canula. It is well to have the terminal end closed, though I have not always taken even this precaution. Vinegar is a good styptic with which to medicate the water, and is generally at hand; use equal parts of strong vinegar and water. Playfair, Barnes, Chambers, Atthill, Steels, and others, recommend the perchloride of iron; three fluidounces of the tinctura ferri muriatis to a pint of water is Steele's formula.* On the other hand, writers have pointed out the dangers attending perchloride of iron injections, and Beck declares in the *Obstetrical Journal*, February, 1874, that he has known death to attend their use. Dr. Graily Hewitt, during the discussion of Beck's paper at the Obstetrical Society, referred to a case in his own practice where death had followed the perchloride injection, probably from absorption of the styptic and consequent blood-poisoning. He prefers vinegar, 1 part to 2 or 3 of water, which, he thinks, can never be harmful. I beleve that the use of the perchloride injections is to-day generally abandoned; at least, in this country.

Whether the water be medicated or not, a considerable quantity should be injected. In order fully to control the hæmorrhage, it may be necessary to inject several gallons. Place the patient cross-wise in bed, with the hips drawn well over the edge. A rubber sheet under her protects the clothing and the bed, and conducts the water into a pail below. The water should be as hot as can comfortably be borne—115° to 118° F.—when poured into the fountain-bag. Dr. Fordyce Barker affirms that this treatment will always "positively, absolutely, and efficiently control uterine

hæmorrhage." His experience coincides with that of multitudes in the profession, who now rely on the hot-water injections.—*Therapeutic Gazette.*

A Simple Method of Curing Obesity.—In a French journal is announced the discovery of a means, as simple as it is strange, for curing obesity, which is attributed to a medical officer in the army. Thanks to this means, a colonel who was threatened to be obliged to retire from the army, as he was so heavy that it required two men to lift him into the saddle, became thin in a few weeks, and to such an extent that he had to take means to recover, in a measure, what he had lost. It was to his doctor that he was indebted to have become a general. The means consisted simply in never eating more than one dish at each meal, no matter what that dish may be, and a person may consume as much as the stomach may bear, and satisfy the appetite without the least reserve. Nevertheless, nothing but the one dish should be taken; no condiments, nor soups, nor supplementary desserts should be allowed. This system was recommended by the author of the note to a lady who was slightly obese, and who put it into practice with the best results. The lady observed that she suffered no inconvenience whatever from this diet, and the result obtained by the medical officer may be well understood, as she found by her own experience that the partaking of only one dish, whether it be meat, fish or vegetables, brought on a sense of satiety much sooner than if she had partaken of a variety of dishes, whence the effect of relative abstinence. —Paris Correspondence *Jour. Am. Med. Ass'n.*

Considerable excitement was caused in the Rush Medical College, Chicago, lately, by the discovery of the theft of several rabbits which have been confined in an outhouse at that institution. The animals had been inoculated with hydrophobia virus by Dr. Lagoria. It was promptly announced that should the thief, whoever he may be, chance to be bitten, a case of rabies would no doubt result, without, however, the rabbits being returned. In the meat markets in the neighborhood rabbit meat was away below par, until it was announced that even should any of the inoculated animals be eaten, no serious trouble would result.

Excursions to the North.

The Vandalia and Illinois Central Line has on sale cheap tourist tickets to all the cool northern resorts. Call for descriptive pamphlets, rates and other information at ticket office, 100 N. Fourth St., or Union Depot, St. Louis.

USEFUL FORMULÆ.

Cosmetics for the Physician.—The secrets of the toilet, the arts by which lovely woman hides incipient corrugations, effaces blemishes, and softens and beautifies her cutaneous apparatus and its appendages generally, are rarely investigated by the physician. He contents himself with removing some particularly obtrusive mark, pulling out superflous hairs, or trying, with spirits and Spanish flies, to fasten in the too deciduous hair. Dr. H. Paschkis, of Vienna, however, has attempted to inaugurate a new era in this line, and has written a book, "Kosmetik f. Aertze," which is intended to enable the physician to add to the æsthetic enjoyment, as well as physical welfare, of humanity. Paschkis' book is said by a reviewer in the *Deutsche Medizinal Zeitung*, to be a thoroughly scientific one. Its formulæ are based upon dermatological knowledge and pharmaceutical experience. As illustrations we are given four formulæ for that popular domestic article "cold cream."

One of them is as follows:

℞ Lanolin, - - - 10.0.
Boracis, - - - - 1.0.
Aquæ rosmarin, - - 100.0.
M. Sig.: Lanolin-milk.

A formula for seborrhœa is the following:

℞ Kali carbonat, - - 10.0.
Aqua destillat, - - - 100.0.
Olei æth. cinnamom, - gtt. 2.0.
Olei æth. rosmarin, - - gt. 1.0—M.

For warts our scientific book of beauty prescribes:

℞ Acid salicylici, - - 5.0.
Collodii, - - - - 20.0.—M.

For sweating feet, five to ten per cent solutions of chromic acid are recommended.

For dandruff and baldness there are, of course, numerous prescriptions; but, we regret to say, no specific is announced. For a simple wash, as preventive of dandruff, we find:

℞ Kali carbonat, - - - 2.0,
Aquæ, - - - 100.0.

The formula for Hebra's dandruff water is also given, viz.:

℞ Spts. æther, - - - 110.0.
Tinct. benzoin, - - - 15.0.—M.

Mouth-washes and tooth-powders are given, the author warning his readers especially against the use of salicylic acid for these purposes.—*Medical Record.*

Red Nose.—Anna's treatment for this troublesome condition, if caused by acne rosacea, is one-half grain of ichthyol four times daily (in pill or capsule), and the nightly application of the following paste:

℞ Zinc ointment - - - - ℥x.
Starch, - - - - - ℥ijss.
Sulphur, - - - - - ʒj.—M.

The enlarged venous trunks should be punctured, and washing, in all cases, with ichthyol soap and warm water.—*Med. World.*

ORIGINAL ARTICLES.

ABDOMINAL SECTION FOR THE REMOVAL OF THE UTERINE APPENDAGES.

BY RUFUS B. HALL, M.D., CINCINNATI, OHIO.

MR. PRESIDENT AND GENTLEMEN:

I believe we can best utilize the time allotted us by a review of the work done in the past year in intra pelvic surgery for the relief of inflammatory diseases peculiar to women. The cases here tabulated, 18 in number, include all of the operations made for the removal of the uterine appendages by myself taken consecutively since my report to this society last year, and are reported as a basis for thorough discussion of this important class of gynæcological work. In no case was the operation made until the patient had been subjected to the best and most approved local and constitutional treatment for many months, and in many instances years; and this treatment had failed. In several instances the patient and those interested in her welfare would not accept an operation until the case was regarded as hopeless by the attending physician. In no case, however unpromising, have I refused to operate, and all have recovered.

Considering the pathological conditions present in all of these cases, the strong adhesions to overcome and the enfeebled condition of many of the patients, the results are all any one could ask. These results have not been attained with ease, and many of the cases gave me no small degree of anxiety for a number of days after the operations were made.

I have no hesitation in saying that I could not make the report to you to-day, unmarred by a death, if I had not had the patients where I could give them careful after-treatment. It has been asserted that the after-treatment in these cases is nothing. My own experience is diametrically opposed to this assertion. As a rule, patients do not require prolonged treatment after these operations, but they require more care and attention for the first few days than other cases requiring abdominal section, except, perhaps, supra-vaginal hysterectomy.

Regarding the difficulties encountered in these operations, I can emphatically endorse the statement made by that eminent and brilliant young surgeon, Dr. L. S. McMurtry, in a paper read before the Southern Surgical and Gynæcological Society in November of last year. He said: "The operations upon the uterine appendages are among the most trying in the entire field of pelvic surgery. To remove pus tubes and adherent ovaries, buried in a mass of adhesions, and friable from cheesy degeneration and suppuration, is among the most severe tasks of operative surgery. Normal relations are destroyed by the exudation, the fingers must make a track to the floor of the pelvis, and blood and pus well up as the exploration and enucleation proceeds. The sight gives no aid; the work is done wholly with the two fingers deep in the pelvis." This quotation fully coincides with my views regarding the difficulties of the operation of removal of the appendages in long standing inflammatory diseases.

I am aware of the fact that these are trying times for men engaged in this special work. They have their way to make and their position to sustain against the many difficulties incident to the work, as well as against the failure of those who insist upon opening the abdomen because it is easy. We all know an uncomplicated ovariotomy is not difficult, but on the contrary, is one of the easiest of the capital operations. But we must admit that the operation is a serious one, to be carefully performed, after very careful consideration. We are to remember that very frequently that which appears to be a simple and easy operation may eventuate in the most complicated condition, and this is the reason for the necessity of careful preparation and training in every detail that pertains to abdominal and pelvic surgery before the work is attempted, if one hopes to attain the best result.

A knowledge of the accidents that may happen is one of the best means of avoiding them. I have long since learned that before opening the abdomen no exact estimate can be made as to the gravity and extent of the complications to be met with in any given case. I am convinced that no man has a moral right to open a patient's abdomen unless he is prepared for any emergency which might occur, and is himself competent to deal with the conditions found, on the spur of the moment, and in a surgical manner. The success of abdominal and pelvic surgery is bounded and measured by the ability of the operator to overcome the many complications.

In presenting this group of cases of tubo ovarian diseases as tabulated, you will observe that it illustrates the severest lesions met with in this kind of work. All the patients had suffered long and severely; all had had peritonitis, not only once but repeatedly.

When salpingitis exists without suppuration, I do not believe, for that reason alone, an operation is justifiable, until the patient has had the most approved local and constitutional treatment for many months. That this is the most judicious plan to pursue is proven by the fact that in many of these cases the patient is made more comfortable by treatment, and occasionally one gets rid of her symptoms, and is so much improved that an operation is not necessary. For these reasons all cases of chronic salpingitis should have a prolonged course of treatment before submitting them to an operation. But, after a prolonged and systematic course of treatment, if the patient continues to suffer great pain, and where the tubes, ovaries, broad ligaments and intestines are soldered, as it were, into a single mass, an operation is indicated and justifiable, even if the existence of pus cannot be made out. In cases XX, XXV

TABULATED REPORT OF THE TEN CONSECUTIVE CASES OF ABDOMINAL SECTION FOR THE REMOVAL OF THE UTERINE APPENDAGES, ETC. Drainage in all cases.—Reported to the Ohio State Medical Society, 1889.

No.	*Date.*	*Residence.*	*Medical Attendant.*	*Pathological State.*	*Remarks.*	*Result.*
1	Sept. 20, '87.	Ritchie C. H., W. Va.	Chas. Scott.	Pyosalpinx.	Was confined to bed for twenty months before operation. Cure complete.	Recovery.
2	Nov. 16, '87.	Piketon, O.	O. C. Andre.	"	Sick for two years. Now in perfect health.	"
3	April 30, '88.	Frankfort, O.	Rufus B. Hall.	Abscess of ovary.	Sick for three years. Now in perfect health.	"
4	Sept. 5, '88.	Sparta, O.	D. P. Bliss and B. B. Scott.	Pyosalpinx.	For eighteen months before operation patient could not sit up for an hour. Emaciation extreme. Septic poisoning before operation. Died on fourth day.	Death.
5	Nov. 3, '88.	Bainbridge, O.	W. B. Lee.	"	Now in better health than ever before.	Recovery.
6	Nov. 22, '88.	Cincinnati, O.	C. R. Holmes.	"	Recovery complete.	"
7	Dec. 27, '88.	Minster, O.	C. L. Dine.	"	Now in good health. Has no pain.	"
8	April 13, '89.	Covington, O.	A. F. Scofield.	"	A great sufferer for years. Large pus tubes removed.	"
9	May 6, '89.	Cincinnati, O.	J. S. Caldwell.	"	Now in perfect health.	"
10	May 7, '89.	Cincinnati, O.	C. D. Fishburn.	"	Now in perfect health.	"

SUPPLEMENTAL REPORT TO THE PRECEDING TABLE SHOWING ONE YEARS' WORK OF INTRA-PELVIC SURGERY FOR THE RELIEF OF INFLAMMATORY DISEASES. Drainage in all cases.—Reported to the Ohio State Medical Society, June, 1890, by Rufus B. Hall, M.D.

No.	*Date.*	*Residence.*	*Medical Attendant.*	*Pathological State.*	*Remarks.*	*Result.*
11	June 17, '89.	Newport, Ky.	R. B. Hall.	Pyosalpinx.	Double pyosalpinx of nine months' duration.	Recovery.
12	Sept, 20, '89.	Chillicothe, O.	W. A. Hall.	"	Invalid for four years. Cure complete.	"
13	Oct. 3, '89.	Cincinnati, O.	R B. Hall.	"	Patient bed-ridden for thirteen months. Now in perfect health.	"
14	Oct. 7, '89.	" "	" "	"	After removal of pus tubes, ventral fixation of uterus for cure of retroversion.	"
15	Oct. 17, '89.	Chillicothe, O.	W. A. Hall.	"	Sick for three years.	"
16	Oct. 22, '89.	Cincinnati, O.	R. B. Hall.	"	Removal of pus tubes. Ventral fixation of uterus for cure of retroversion.	"
17	Nov. 7, '89	" "	C. B. Van Meter.	"	Two years before had operation on lacerated cervix which gave no relief. Now in perfect health.	"
18	Nov. 25, '89.	" "	" "	"	Sick four years. Now well.	"
19	Nov. 27, '89.	" "	R. B. Hall.	"	A great sufferer for 14 months. Perfect cure.	"
20	Jan. 6, '90.	" "	" "	Tubercular salpingitis.	Sick for five years. Improving rapidly. Gained 18 pounds in weight.	"
21	Jan. 23, '90.	" "	J. A. Murphy.	Pyosalpinx.	Sick five years. Very feeble. Improving and gaining in weight.	"
22	Feb. 19, '90.	Coalton, O.	Wm. Drake.	"	Sick six years. Dates abdominal pain from time of forcible dilatation of cervix three years ago.	"
3	March 15, '90.	Dayton, Ky.	W. D. Richards.	"	Invalid for two years. Cure complete.	"
24	March 19, '90.	Chillicothe, O.	J. W. Lash,	Abscess of ovary.	Sick five years. Bed-ridden one year. Cure complete.	"
25	March 27, 90.	Cincinnati, O.	O. P. Holt,	Chronic salpingitis and ovaritis.	An invalid six years. Appendages removed. Cure complete.	"
26	May 7, '90.	" "	L. A. Shepard.	Pyosalpinx.	Sick for two years.	"
27	May 24, '90.	" "	E. S. Stevens.	Chronic salpingitis and ovaritis.	Sick for two and one-half years.	"
28	May 27, '99.	Vinton Co.	R. B. Hall.	Pyosalpinx.	Sick for two and one-half years.	"

and XXVII, the operations were made for the relief of these conditions.

Case XX, which proved to be tubercular salpingitis, had been treated by a number of good physicians for five years. She had the benefit of a change of climate, yet she was constantly growing worse. She had three attacks of hæmoptysis within three months' time just preceding the operation. There was dulness on percussion over the apex of the right lung, and daily exacerbations of fever for ten weeks just preceding the operation. She could not be out of bed for a whole day for many weeks, and was losing flesh and strength. She had suffered from repeated attacks of abdominal inflammation, and had constant pelvic and abdominal pain. The uterus was fixed by inflammatory exudations and was exceedingly sensitive to pressure. It is not quite five months since the operation, and she is now in better health than she has been at any time since her illness commenced. She has gained eighteen pounds in flesh, and with it her strength has returned. I await the ultimate result with much interest.

Cases XXV and XXVII were likewise chronic invalids, with constant pelvic and abdominal pains. They, like the preceding one, had suffered from repeated attacks of peritonitis. The uterus was fixed with inflammatory adhesions, and it was with the greatest difficulty that the appendages could be found and removed.

These three cases are the only ones in the whole series of twenty-eight in which there was no pus to be found in the pelvis, yet the operation has restored them to health after all other measures had failed.

All the remaining cases had pyosalpinx, except Case XXIV, which was an abscess of the ovary.

In many of these cases it was impossible to separate the adhesions without bursting the pus sac. In every case where this occurred, and in cases where there was much bleeding, the abdominal cavity was washed out with the gravity tube. Free washing out of the abdominal cavity need not be feared, as the heat relieves the shock. I have constantly employed it when necessary since April 7, 1887, and have not seen a single case where it caused a single bad symptom. I irrigate until the water returns as clear as it was before it is put into the cavity.

Although all of the cases recovered, a number of them would not submit to an operation until they were *in extremis.*

Let us turn for a moment to the other side of the picture. Since my report to this society last year, I have seen four cases in consultation and advised an operation for the removal of pus tubes, which advice was refused by the physicians in charge and the friends of the patient, because an operation involved danger to life. All of these cases died within a few weeks after the consultation. They all died from peritonitis, with every indication of a ruptured pus tube. In but three could an autopsy be secured, and in these a ruptured pus tube was found to be the cause of the fatal attack of peritonitis, and I have no hesitation in saying that the same condition existed in the fourth, but could not be verified because an autopsy could not be secured. I refer to these cases to show that in cases of pus in the pelvis there is danger to life in the so-called conservative plan of treatment, as well as in operation.

In this instance, taking the whole twenty-eight cases, there is a mortality of less than 4%, where all have been operated upon that would submit to the operation; but in the four refusing the operation, and which were treated by what is called the conservative treatment without an operation, there was a mortality of 100%. The preceding tabular reports of two series of cases operated upon will bring out the interesting points of the individual cases.

PERINEAL PRESERVATION DURING LABOR.

BY SAM CUNNINGHAM, M.D., ELGIN, TEXAS.

Read before Austin District Medical Society, Austin, Texas, June 19, 1890.

I have selected this subject more with a view to what is to myself of interest and importance, than with the thought of its proving either interesting or instructive to you. Should any further apologies be necessary, however, for occupying the time of the society on so old a theme, permit me to offer as my defense the vast number of women broken down in health with lacerated perineums who are continually consulting the gynæcologist.

Perineal preservation, or "supporting the perineum," as it is commonly termed, is entirely the outgrowth of civilization. The uncivilized, or ruder nations, make no attempts in this direction whatever, and if it were possible to obtain a tabular statement of the tears happening among a people who practice no method of preservation, and then compare it to the number of lacerations occurring in the hands of those practicing the most active measures, even to the extent of continuous support from 4 to 20 hours, it would certainly be a matter of interest and profit. I feel confident that either of the methods which have been adopted for the protection of this important structure, have been defective, or that they have been improperly executed, otherwise we would not meet so constantly with the undeniable proof of many disastrous failures. There is a vast difference of opinion amongst obstetricians as to the best methods of management of the perineum in labor. To prevent laceration, the majority of works advise the manœuver described as "supporting the perineum," while others claim that it is best to let the head gradually dilate the soft parts without any assistance or interference of the attendant.

It would be a considerable item of interest were it possible to obtain a percentage of the failures belonging to each of the methods now in use for the avoidance of laceration, but such information can not easily be obtained. Outside of hospitals, statistics are not very

abundant upon perineal lacerations. There no doubt exists great unwillingness, or a delicacy on the part of the profession to acknowledge the occurrence of this accident unless it has happened at the hands of some other practitioner.

Again, another one of the most vital causes of our incomplete knowledge or information upon the number, as well as the extent of injuries occurring to the perineum, is a failure to examine the patient after delivery.

Before suggesting or discussing any special methods of preserving the perineum, a mention of some of the causes that render some form of interference necessary, I hope will not be inadmissible.

First, one of the most frequent causes of injury to the soft parts of the mother, is that when the labor is too rapid, the unyielding head being propelled before there has been time sufficient for dilatation.

Second, a rigid condition of the perineal tissues and of the vaginal orifice. The texture of the vaginal tis sues is thinner than the perineal, although it is less dis tensible. Rigidity, however, more particularly applies to the primipara, and the age of the woman may also here be considered, as this condition of inelasticity will be more often found in aged primaparæ.

Third, the sex of the child may be regarded as a factor in calculating the probabilities of a laceration of the perineum. The male head being larger, generally its birth is attended with more danger to the perineum, especially in primiparous labors.

Fourth, there are cases wherein there are anatomical peculiarities, such as the sacrum being too perpendicular, in which instance the propelling force acts in the direction of the perineum more than in the outlet of the parturient canal. Then, again, as a peculiarity anatomically, cases in which there is too little inclination of the pelvis, which condition is a formidable opponent to the integrity of the perineal tissues because of the liability to rapid labor.

Again, a narrow pubic arch, or a long symphysis pubis, in either case compelling the head to go further down in order to escape than when these conditions are otherwise, thus endangering the perineum. To this condition I will also add that most frequently too much voluntary force is exerted by the patient; sometimes too, this exertion is assisted by old granny women who are generally present on such occasions and who take it as devolving upon them to instruct the lady how to conduct herself that she may get through safely, quickly, etc.

Fifth, malpositions, as in face presentations, when the mento-occipital diameter is made to distend the vulvar orifice to so much greater an extent than does a vertex presentation of the anterior varieties. Again, malpositions of the posterior vertix, when the extension of the head occurs backwards over the perineum.

Sixth, and last, though not least important in reckoning the causes of laceration of the perineum, in my humble opinion, is the use of ergot before the inauguration of the second stage of labor.

Various other causes for perineal laceration might be enumerated, many of which are entirely opposite in character, which fact being the case, we may safely conclude that there is no certain method, or single line of treatment, to be adopted that would be applicable in all cases, but that the management must be such as will meet the exigencies of each particular case.

As the first prerequisite in successful preservation of the perineum in labor, a knowledge of the anatomy of the female pelvis and its organs is most essential, without which the practitioner is poorly equipped for the emergencies that frequently surround him, and for the extreme necessity of making a critical diagnostic examination on first seeing the patient. Being acquainted with the various complications of labor dangerous to the perineum, and having a good understanding of the case in charge, it will oftentimes be found that many of the so-called causes of laceration can be removed and many others aborted.

In this enlightened age of obstetrical science, a laceration of the first kind (viz., rapid labor), is hardly ever justifiable if the case is seen in time.

Relaxation of the muscular system can generally be induced by the use of chloroform, which, when properly administered, I shall hold that the perineum is under far safer control. Of course I want to know that the condition of the heart and lungs is good, that no kidney trouble exists, and no great tendency exists towards post-partum hæmorrhage, before employing the chloroform to a great extent. Instead of "supporting the perineum," control the presentation. Manipulations directed to the perineum have a tendency to destroy the integrity, and the best results will be found in directing the presentation rather than the perineum itself.

With two fingers in the rectum entire control of the head can be maintained, especially when the mouth is accessible, then the presenting part should be only allowed to escape during the interval of contraction. In most instances the head, when greatly distending the perineum, thereby threatening laceration, can be controlled absolutely without resorting to the rectal touch, which is always repugnant to both physician and patient. This is most admirably accomplished by the practice of Dr. Goodell's method, described by Playfair, viz.: "The thumb and forefinger of the right hand are placed along the sides of the distended perineum, pushing it gently over the head at the height of the pain, while the tips of the fingers may at the same time press upon the advancing vertex which will impede its progress." By the employment of this method the sudden distension of the perineal tissues is prevented, and the chances for laceration equally lessened, being reduced almost to a minimum.

At no time during the whole labor should sight be lost of the mechanical relations. In cases of peculiarities of the pelvis and malformations of the vertex, each

will need to be managed as good judgment may dictate. When there is too much flexion, upward movement of of the head toward the symphysis should be favored; this is best accomplished, however, through the rectum. If, before relaxation of the perineum is complete, too early extension of the head occurs, the head should be pressed backward toward the sacrum.

Most certainly it is not in accordance with good judgment, nor is it needful, to sit by the bed with the hand applied to the perineum for hours, as is practiced by some, but simply intervene in time to assist relaxation when the perineal distension has reached its maximum and the head is about to be expelled. There are times when laceration of the perineum is inevitable; then the bilateral incision of the vulva should not be deferred. If the continuity of the tissue must be destroyed, then control the locality and as far as possible the extent of the tear.

As to the use of ergot, I shall hold that so long as the uterus is occupied by the child, the placenta and membranes, no perineum should be endangered by its untimely employment.

REPORT ON PROGRESS.

GYNÆCOLOGY.

BY F. D. MOONEY, M.D., ST. LOUIS.

What Civilization is Doing for the Human Female.

Under the above title, Dr. A. Lapthorn Smith (*Can. Med. Rec.*) endeavors to point out in what manner the altered circumstances of civilization are affecting the nature and health of the human female.

In the savage woman the muscular system is developed quite equal, and in many cases, superior, to that of the male. In her there are no muscles that are never called into action, and the physiological processes are carried on regularly and with ease. When the tribe is moving, she not only transports herself, but one or more of the smaller children, and, when settled, she cultivates the soil, gathers fuel, etc., while the occupation of the men is less calculated to develop them.

Under the influence of civilization she changes her habits from outdoors to indoors; she is deprived of fresh air; she acquires the art of changing her shape, and instead of an apparel which gives full scope for the development of the chest muscles, at puberty, she is encased in a dress which prevents the lower ribs and diphragm from acting. There is diminished lung capacity, and breathing power and abdominal respiration is rendered impossible. Instead of her clothing swinging from her shoulders, heavy skirts and abundant ornamental trimmings are supported by the hips.

The corset diminishes the effectiveness of the lungs, lessens the nutritiousness of the blood by decreasing the amount of oxygen supply. It compresses the chest and interferes with the diastole of the heart, interfering with the circulation, and helps to cause enlargement of the liver, one very potent factor in the production of diseases of the female pelvic organs.

It interferes with the peristaltic action of the bowels, causing constipation, malnutrition, and Clark's "fæcal anæmia." It presses the liver backward, interfering with the return blood, and causing varicocele of the veins of the broad ligaments, so much so that the author claims that the removal of the corset would oftentimes save the removal of the ovaries.

The tendency of all civilization is, in the female, to the atrophy of the whole muscular system and the replacing of it by fat and nerves—principally by nerves.

This supremacy of the nervous system of the highly civilized gives a peculiar complexion to all diseases, their symptoms being out of all proportion to the actual disease. Slight functional disorders of the organs of generation are magnified into actual diseases. Nervous sedatives have become the fashion—almost a necessity—and domestic happiness is not so common as it once was.

The whole nervous system being less capable of exertion, and the nervous system more highly developed, it is not surprising that such a complex process as labor should be injuriously affected, and such has been the observation of most observers.

Labor amongst the savage women is accompanied with but little pain, the first stage not interfering with her ordinary avocations. The membranes do not rupture until the parts are fully dilated, and lacerations seldom occur.

With the civilized woman the period of dilatation is protracted and exhausting. The amniotic sac often gives way early, and the obstetrician is obliged to apply forceps on account of exhaustion, and, as a result, lacerations of the cervix and perineum follow. Then she must remain on her back ten or twenty days and is subjected to all of the various troubles which may arise from retention and decomposition of lochial discharges, while the savage is up and around, and the discharges draining away, and septic troubles unknown.

While civilization tends to the development of smaller pelves, it is developing the heads of male children larger, for in the struggle for existence it is the large head and not the strong arm which wins.

The lesson to be learned is that a majority of the diseases of women which we are called upon to treat at the present day did not exist among women four centuries ago.

That the most of them are but the logical and to-be-expected outcome of the altered circumstances by which civilization is surrounding them.

That the first step to be taken in their treatment is to undo, as far as we can in one generation, the wrong that civilization has done them, and use our influence to correct the mistakes and consequent sufferings of the present times.

The Value of the Different Methods of Treatment for Cervical Endometritis.

Stratz reports the results obtained by different methods of treatment of cervical endometritis.

His observations are based upon the results obtained by the treatment of 25 cases by each method.

The first series was treated by the daily application of a 10% solution of chloride of zinc for about eighty days. Five months afterward ten were not cured, and there was a recurrence of the disease in fifteen in two or three months.

The second series was treated by the application of a 50% solution of chloride of zinc, twelve applications in sixty days. Six were cured, three received no benefit; in the rest there was a recurrence after two months. In no case were any unfavorable symptoms observed.

The third series was treated by the excision of the diseased mucous membrane after Schroeder's method. All cases so treated recovered.

The fourth series was treated by the application of a concentrated solution of lactic acid. Ten recovered, two were not benefited, and there was a recurrence in the others.

He concludes that mild applications are useless, while stronger ones will cure a certain proportion of cases, but that the only sure prospect of cure is in the excision of the mucous membrane.

Electricity in the Treatment of Uterine Fibromata.

Dr. G. W. Parker (*Annals Gyn. and Ped.*) says that his attention was first called to the use of electricity for myomata by Dr. Kimball, at Mr. Spencer Wells' Hospital when he had gone to see him operate.

He saw Dr. Kimball operate as early as 1874. The battery was made of zinc and carbon plates, six or eight in number, giving a surface of about 13 square feet. The solution used was the ordinary battery fluid. When in good condition it would heat to a red heat five inches of No. 20 platinum. The cell was a basket lined with lead, the conductors were copper wires and the electrodes were like grooved directors sharpened at the points.

These he plunged, through the abdominal walls, into the tumor two to four inches, not always giving an anæsthetic. The current was passed from five to fifteen minutes, causing contraction of the muscles and considerabla pain.

In 1875-6 Dr. Parker used electrolysis in three cases of supposed fibroids. The needle was passed through a hard rubber tube which was introduced into the cavity of the uterus, and then thrust into the tumor about two inches, the other electrode being over the abdomen.

The current of from 12 to 18 Leclanche cells was used as the patient could bear it, and continued from fifteen to thirty minutes. In one case the tumor was reduced from five inches in diameter to nothing that could be felt. In the second case the hæmorrhage was checked but the tumor continued to grow dnring the first year, since which time it has remained stationary —ten years.

In a third case electrolysis was used for an intra mural fibroid. The enlargement was much reduced and has given no trouble since.

Rules for the Use of the Sharp Curette.

Dr. H. Marion-Sims (*Annals Gyn. and Pæd.*), speaking of the curette, strongly urges the use of the sharp instrument in preference to the dull, claiming that by its use any growth or fungoid degeneration of the utricular glands can be more thoroughly and effectuallly removed, and, at the same time, safely. He has completely failed to afford relief, in a number of cases, with the dull curette.

Like any other sharp instrument it is valuable only in the hands of those who understand its uses, and, for the same reason, dangerous in reckless hands.

He lays down the following rules, viz:

Never curette a patient in the office.

Curette carefully, thoroughly and without haste. When the curette is passed over diseased tissue no sound is produced, while if it is passed over healthy tissue a peculiar rasping sound is produced, similar to that produced by passing the instrument over the palm of the hand.

After curetting, the uterus is carefully washed out with a 5% solution of carbolic acid. Twenty or thirty minims of tinct. sodium are then injected into uterus, which produces contraction and checks hæmorrhage.

The patient is kept in bed from three to five days, depending upon the amount of reaction.

The Care of the Nipples during the latter part of pregnancy and while lactation is going on, is a subject to which most text-books on midwifery devote a good deal of attention, advising the application of alcoholic preparations, alum, tannin and other hardening and astringent substances with the idea of toughening the nipples so that they will be least likely to crack. Professor Parvin, of Philadelphia, however, does not believe in this hardening treatment; he contends that to harden the skin is to make it all the more likely to crack, and that treatment should be directed to keeping the nipple soft. He says that nature provides for this softening by supplying the nipple with a vast number of sebaceous glands, whose oily secretion softens the skin and at the same time aids it in shedding water. Alcoholic preparations, by dissolving this oily secretion, defeat the purpose of the glands. Hence Dr. Parvin advises instead of the routine treatment the substitution of careful washing with plain soap and water to prevent the milk from drying on the nipples; as this removes some of the fatty matter its place may be supplied by applying cocoa butter.—*N. W. Lancet.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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Original Articles, Reports of Cases, Correspondence, etc., relating to interesting medical topics, are cordially invited.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, JULY 19, 1890.

MEETING OF THE GENERAL COMMITTEE ON SANTITATION.—REPORT OF PRELIMINARY WORK ACCOMPLISHED.

At the meeting last May of the Missouri State Medical Association, the president recommended that a special committee of one from each congressional district be appointed, and that this committee have authority to appoint a sub-committee of one in every county, the object being to aid the State Board of Health in its sanitary work, and to arouse public attention to the necessity of organizing for the more thorough and systematic prevention of disease. It is hoped by this means to secure needed legislation of a sanitary character from the next General Assembly.

The Association passed a resolution to this effect, and the members of the committee have been appointed, as follows:

First District, D. H. Shields, Hannibal.
Second district, G. R. Highsmith, Carrollton.
Third district, Tinsley Brown, Hamilton.
Fourth district, E. A. Donelan, St. Joe.
Fifth district. P. S. Fulkerson, Lexington.
Sixth district, J. W. Trader, Sedalia.
Seventh district, A. B. Miller, Macon City.
Eighth district, L. P. Pollman, St. Louis.
Ninth district, F. J. Lutz, St. Louis.
Tenth district, R. J. Stoffel, St. Louis.
Eleventh district, C. A. Thompson, Jefferson City.
Twelfth district, G. W. Holcomb, Clinton.
Thirteenth district, W. A. Camp, Springfield.
Fourteenth district, H. E. Shuttee, West Plains.

Dr. Trader was appointed chairman and called a meeting at Sedalia on the 10th inst., where views were exchanged and a working plan was agreed upon. Dr. Highsmith was appointed secretary, and on motion of Dr. Camp the member from each district was instructed to appoint a sub committee from his district subject to the approval of the chairman, and the secretary was instructed to notify absent members to get the sub-committees in working order as sood as possible.

A resolution was adopted constituting the chairman and secretary a sub-committee to draft an address to the public, setting forth as clearly and briefly as possible the urgent necessity of sanitary measures for the public welfare; it was ordered that this address be printed and distributed as widely as possible, it being accompanied with an abstract of the proceedings of the meeting, and a list of the names of the General Committee and sub-committee.

The meeting then adjourned, subject to the call of the chairman.

It is expected through the systematic and well-directed work of the physicians of the State constituting the committee that the attention of the people will be brought to the backward condition of the State in sanitary matters, and the legislature be induced to provide more liberally for such work in the future.

A NEW TREATMENT FOR UTERINE MYOMA.

Prof. Rydygier, Krakow, first came upon the idea about 1½ years ago, of treating uterine myoma by cutting off the nutritive supply through ligation of the principal arteries, thus causing the tumor to disappear. (*Wien. kl. Woch. Deutsch. Med. Zeit.*). If a permanent result was to be assured, all the larger arteries should be tied off, that is to say, the spermatic and uterine arteries on both sides.

Experiments on the cadaver showed that the operation could be easily carried out by means of a laparotomy, and the dangers of the operation must be comparatively trifling. Another consideration forced itself on his attention, however: might not the ligation as planned be sufficient to bring about rapid gangrene? Again, if this did not occur, and nutrition was supplied to the parts through some new channels, the latter might interfere with the complete cure of the condition. These were questions which could only be answered by actual experience. It is known that by Hegar's method of castration a permanent cure of existing uterine myomas is effected, and consequently there is a choice offered between this and the new operation. Rydygier believes his method to be the preferable one, and for the following reasons:

1. The results seem more certain, because by tying off all the arterial supply the development of a collateral circulation is markedly hindered.

2. Ligation of the principal arteries is more easily carried out and is at the same time less dangerous than castration.

3. The patient will consent to ligation much more readily than castration, which latter operation always has a morally depressing effect upon the patient.

Influenced by these considerations, in June, 1889, the the author operated upon a woman, æt. 49 years, who had a myoma of the anterior uterine wall of the size of two fists.

After the preliminary laparotomy, the mass of vessels containing the spermatic artery and vein were easily found at the brim of the true pelvis; the peritoneum was incised and the artery isolated and tied in two places, the peritoneal wound being then united. Both uterine appendages were then tied with ligatures passed underneath them, and finally, a ligature was passed around each round ligament to cut off the anastomosis with the external vessels.

The case progressed without disturbance. The previously uninterrupted uterine hæmorrhages immediately ceased, and did not reappear. A month after the operation only a trifling decrease in the size of the tumor could be noticed. Four months afterwards the patient was again seen; the tumor had dwindled down one-fourth of its former size; the patient had no disturbance to complain of. The hæmorrhages had not returned. Whether the tumor will at some time in the future resume its growth, is a question which future observations alone will answer.

Operation for Hernia.

The difficulties in the way of a permanently successful radical operation for hernia are great and hard to overcome. Any modification of the various operations now in vogue will doubtless be read with interest. Mr. Ernst Kingscote, M.B., in the *Brit. Med. Jour.*, gives a description of an operation which he has been in the habit of performing for some time; the results have been quite successful. One patient who was operated on about two years ago, and through the abdominal opening of whose hernial sac one could almost thrust the fist, has since then given the operation a severe test by ascending the Matterhorn. Another case was that of a lady operated upon three years ago, who has had no return of the trouble. In no case was a truss worn after the operation.

The incision through the skin is transverse, and well above the proposed field of operation. The lower lip of the wound is pulled down with a retractor to expose the side of the ring during the operation; afterwards it is carried up to its original position, thus removing the wound away from the pubic region and lessening the danger of infection.

"The operation is then conducted, up to the point where the treatment of the stump commences, on similar lines to those of Macewen, Barker, and Bishop, the fingers and handle of the scalpel being used where possible instead of the knife. The sac is then carefully dissected out, as in Macewen's operation, for about half an inch round the abdominal aspect of the internal ring, l two stout absorbable catgut sutures are inserted diagonally through the stump as far inwards as its separation from the abdominal wall will allow, and carried on loosely through the pillars of the ring. One or more fine absorbable catgut stitches (stout ones are unneccessary owing to the quickly uniting properties of the applied peritoneal surfaces) obliterate the opening into the peritoneal cavity.

The stump is then pushed a little inwards, and three —or more if necessary—very stout catgut sutures are introduced through the transversalis fascia, etc., (the point of the needle impinging on that of the previously inserted forefinger), and the ring tightly closed, leaving, of course, sufficient play for the cord. The stout diagonal sutures through the stump are now firmly tied over the tightly closed-up ring, and the operation is completed in the usual way, great care being taken throughout to stop every vestige of hæmorrhage.

The advantages of the operation are:

1. The preliminary incision is removed as far as possible from septic sources.
2. An admirable smooth internal pad is obtained.
3. The two serous surfaces of the stump are applied and unite in, say, 36 hours.

Pleuritis and Tuberculosis.

In a paper read before the American Association of Physicians, Dr. A. A. Smith, of New York, discussed the etiological relations of tuberculosis to pleuritis. He states that much more care must be given, not only to the diagnosis and etiology, but to the prognosis and treatment, if the claims of many competent observers be accepted, that tuberculosis is the exciting cause in most of the cases of pleuritis not traceable to the ordinarily recognized causes. This is, however, very difficult to prove in any given case, unless there is evidence of tubercular lesion elsewhere. Though it is not possible to show tubercle bacilli in most of the cases of sero fibrinous pleural exudates, this does not prove their non-existence, for, as Von Ziemessen suggests, they may be lost in the perforation made by the exploring needle, or they may occur only in the form of spores. Inoculation of the lower animals with pleural exudates has not produced true tuberculosis, but merely acted injuriously. This, also, is no convincing proof of the non-tubercular nature of such exudates, for material from tuberculous joints has the power of producing tuberculosis in animals only to a very moderate extent.

Dr. Smith cites the report of Dr. Barrs, who investigated 74 cases of pleuritis under treatment from 1880 to 1884 inclusive, which had apparently recovered from pleuritis, but show a death-rate of 57% at the present time. Dr. Barr thinks the majority of cases of pleuritic effusion, excluding the empyema of children, to be of tubercular origin.

Coxiveaud, on the other hand, reports a series of 27 cases followed for a number of years, which seem to point to just the opposite conclusion.

Dr. Smith has had during the last 12 years 11 cases of pleuresy with effusion in private practice, of which 7 were purulent and 4 sero fibrinous. Of the 7 purulent cases, but 1 has developed tuberculosis, the others re covering. Five of these seven cases followed pneumonia. Of the four sero-fibrinous, two have apparently recovered and two developed tuberculosis. These cases, however, have not much value, because sufficient time has not elapsed. He has also made observations of 140 autopsies in which there were old or recent changes in the pleura; 33.5% of these died from pulmonary tuberculosis. Only 9 of the series of 140 cases showed unmistakeable evidences of tubercular pleuritis; 97 showed evidences of pulmonary tuberculosis, of which 47 were extensively involved.

From his own researches and a study of the researches of others, he offers the following conclusions:

1. If it be true that the very large majority of cases of pleuritis, not traceable to ordinarily recognized causes, are tubercular, we have no clinical method by which the fact can be proven, and the assumption that they are tubercular can only be by inference.

2. If such a large majority of pleurisies, as many seem to believe, are of tubercular origin, recovery from tuberculosis of the pleura is much more frequent than from pulmonary tuberculosis.

3. The prognosis in purulent pleural exudate is more favorable as to the subsequent development of tuberculosis than in sero-fibrinous exudate.

4. That even though at an autopsy, evidences of pleuritis recent or old may be found, it does not necessarily follow that the pleuritis is tubercular, because there are tubercular lesions in the lung.

5. It is fair to assume from the frequent association, post-mortem, of recent and old changes in the pleura with pulmonary tuberculosis, that many of these changes are tubercular in origin, although at the time of death tubercles are not found in the pleura.

6. In cases of pleuritis, although evidences of tuberculosis exist in the lungs, as shown by physical signs, and by the presence of tubercle bacilli in the sputa, it does not necessarily follow that such cases of pleuritis are tubercular in origin, although they probably are.

7. In cases in which pulmonary tuberculos develops subsequent to a pleuritis, there is probably the same underlying cause for each.

MEDICAL ITEMS.

Vinegar often relieves at once the irritation produced by the bites of mosquitoes and other intects.

The Surgeon-General of the Army, Dr. John Moore, will be retired on August 16th, on account of his reaching the age limit.

Saccharine Adulterated.—It has been discovered now that commercial saccharine is not a pure benzoic sulphuride but is adulterated with parasulphaminebenzoic acid and orthololuenesulphamide. We have been expecting this for some time.—*Dixie Doctor.*

A New Hospital at Zanzibar.—The Emperor of Germany has subscribed 20,000 marks to help in the establishment of a new German hospital at the capital of Zanzibar, in East Africa.

He Wouldn't Stand any Nonsense.—Countryman (to dentist): The tooth next to that 'un aches too, doc.

Dentist: Yes, it aches in sympathy.

Countryman: Yank it out; durn sech sympathy.—*Pac. Med. Jour.*

Prostitution in Vienna.—The police authorities of Vienna are making an exhaustive inquiry into a number of questions bearing on the regulation of prostitution. The professors of syphilology and dermatology are taking an active part in the investigation.

Scotch Diagnoses.—According to the report of the Glasgow medical inspector, nearly 8% of the persons sent to the fever hospitals were found to have been incorrectly diagnosed, and of this number 57% suffered from no contagious disease whatever.

St. Louis College of Physicians and Surgeons, encouraged by a class of 160 last year, have moved their location from North Market Street to Jefferson avenue and Gamble street where they are erecting an elegant college building. The new location promises to be a good one.

Calomel and Bicarbonate of Sodium.—The darkening of calomel when mixed with common bicarbonate of sodium is probably due to the presence of thiosulphate in the bicarbonate, the calomel being converted into mercuric sulphide. This may also explain the irritant effect frequently produced by this combination. —*Pac. Med. Jour.*

Dr. John A. Weyth, the eminent New York surgeon will deliver the address before the Mississippi Valley Medical Association at Louisville, Ky., Oct. 8. Quite a number of gentlemen prominent in medicine in the Mississippi Valley have signified their intention of being present and reading papers. The outlook for the meeting is very encouraging.

Some German Universities.—The number of students in the University of Greifswald this summer semester is 902, being the largest number ever on its books. Of these, 421 are students of medicine, 274 of theology, 98 of philosophy, and 95 of law, while 24 are allowed to attend particular lectures without having matriculated in any faculty. At Erlangen the number of students is 1,012, being the first time it has exceeded 1,000. The the theological faculty used to be the most

numerously attended, but this year medicine heads the list. At Marburg there are 1,003 students, this being also the first time the number of 1,000 has been exceeded. There are 269 students in the medical faculty.

Needle-makers' Phthisis.—A sanitary physician at Stratford-on-Avon calls attention to the large mortality (7%) from phthisis among the workers in needle factories. He attributes the prevalence of the disease to the general insalubrity of the factory buildings, and more particularly to the insufficient ventilation of the work-rooms.—*Medical Record.*

The Word "Semester" a Back Number.—In the University of Berlin the academic year will henceforth be divided into a winter and a summer *Halbjahr* (half year), the term "semester" hitherto in general use being proscribed, probably in deference to the ultra-Teutonic spirit which is at present insisting on the expurgation of the German language from all taint of foreign influ ence.

Editorial Changes.—Drs. Jacob Geiger, M. W. Loeb and J. W. Heddens having resigned from editorial duties on the St. Joseph *Medical Herald*, Dr. Daniel Morton has taken the helm, and will without doubt continue the successful policy that has marked the progress of our esteemed contemporary the last year or so.

Dr. Edward P. Davis has succeeded Dr. I. Minis Hays as editor of the *American Journal of Medical Sciences.*

Salol in Diagnosis.—A curious use of salol as a diagnostic agent is made by Pal, of Vienna. Acid compounds of phenol are broken up by the secretions of the pancreas and of any other part of the intestinal canal, except the stomach. If, then, salol be given, and the urine responds to the tests for salicylic acid, the salol has passed the pyloric orfice. In two cases where this reaction was not given, occlusion of the pylorus was diagnosed; and this was confirmed by the autopsies.—*Times and Reg.*

Four Children at a Birth.—A pretty well authenticated story comes from a Pennsylvania town concerning the birth of quadruplets to a woman in that place. The four children, all girls, have been baptized under the names of Agnes, Aloysia, Agatha, and Ada. The pictures of the children have been taken and are being sold for the benefit of the family. The unhappy father was somewhat consoled the other day by the receipt of six town lots from a land company in Colorado, who have named certain streets of their town after the four children and their parents.

A Lesson in Gynæcology.—Dr. More Madden, of Dublin, in a communication to the Texas State Medical Society, advises gynæcologists—who are apt to emphasize the importance of local treatment—not to overlook the constitutional predisposing cause as well. He refers to a case occurring in his own practice wherein he became a victim to specialistic narrowness. The patient had long suffered from pelvic symptoms; had been treated for retroversion by pessaries without number; and Dr. Madden for a considerable time persevered in local treatment. At last he learned "she inherited gout," and found also the urine laden with uric acid. Under constitutional treatment she recovered and thenceforth remained practically free from further discomfort.—*Med. Age.*

An Unfortunate Mistake in Dose.—A woman died not long ago in an English infirmary from an overdose of chloral, administered to her by the nurse on the doctor's order. The house surgeon found a bottle in the medicine closet, labelled "chloral, 1-2 solution." He, curiously enough, took this to mean thirty grains to the ounce, instead of thirty grains to the drachm, and prescribed accordingly. The patient had undergone an operation of resection of the intestine for strangulated hernia. She was doing very well, and would probably have recovered but for the surgeon's blunder.

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Another Antiseptic, Sysol.—Dr. Gerlach, of Wiesbaden, has described the antiseptic power and advantages of sysol, which he has recently used with much success in Wiesbaden. As a bactericide it is more powerful than carbolic acid or creolin; it is less poisonous than either of these two; and, finally, it is much cheaper than either. Sysol is not confined to use in closets, stools, washings, etc., but may be applied anywhere in the domain of medicine without any danger of poisoning or of discomfort. The active principal in sysol is the cresote. Gerlach believes that the drug will be found to be of real value, and that it will come into general use.

A Contribution to the Subject of the Inheritance of Acquired Deformities.—There is at present much interest felt in the subject of heredity, and particularly of the views of Wiesmann and his school. The following communication from a correspondent in St. Clairsville, O., whose name we cannot decipher is timely. He writes:

"One of my patients has a black Newfoundland bitch —she had a long, bushy tail. The first several litters of pups were all like the mother, so far as having nice, long tails. Sometime since, an evil disposed person shot off about half of her tail. Since then she has had several litters, and about one half—just one-half—have short tails. What is the physiology of this case?—*Med Record.*

A Novel Point.—A curious and, so far as we are aware, novel point has been raised in one of the Irish law courts resulting from the disastrous railway acci

dent at Armagh some two years ago. A woman who was in the train at the time of the accident, and in an early stage of pregnancy, subsequently gave birth to a crippled child, and the child now sues the railway company, through its father, for the damage it has sustained in being crippled in consequence of the railway accident. Of course everyone is familiar with instances in which malformations have been ascribed, with more or less probable accuracy, to some injury or shock the mother received during her pregnancy, but we have been unable to find any instance in which such malformation has hitherto been the ground of an action at law.—*Brt. Med. Jour.*

SOCIETY PROCEEDINGS.

TRANSACTIONS OF THE GYNECOLOGICAL SOCIETY OF CHICAGO.

Regular meeting, February 21, 1890, the President, James H. Etheridge, in the chair.

[CONCLUDED.]

PLACENTA PREVIA.

DR. J. S. KNOX.—Mr. President, five cases of placenta previa have come under my observation, and I would like to make a few deductions from them.

The first case was a central implantation, profuse hæmorrhage occurring at the completion of the sixth month. I was called in consultation by the physician in charge and found that he had applied a tampon. The woman was almost exsanguinated from loss of blood, and the pains were strong and expulsive. The tampon had been in three hours, and I was satisfied from the character of the pains that the os must be to some extent dilated and that delivery would be proper. Rapidly taking out the tampon, I was able to get two fingers through the os, passing directly through the placenta, and found the feet presenting. I seized the feet and made the extraction without difficulty. The placenta came readily away. The woman was so utterly feeble, and almost pulseless that no attempt was made to disinfect the uterine cavity or the vagina, but she was freely stimulated. She made a slow but satisfactory recovery, without evidence of septic infection.

The second case was a patient of my own, living on Washington Boulevard. It was a second pregnancy following a first confinement within three months. At the sixth month of gestation she had a hæmorrhage while asleep in bed, which awakened a suspicion in my mind of placenta previa. A careful examination confirmed the suspicion, and Dr. Miller, who saw the case with me, made the same diagnosis. I secured a Braun's colpeurynter, and, getting a competent nurse from the hospital, instructed her in its use and determined to let the woman go to the seventh month. A second hæmorrhage occurred two weeks after the first, which ceased almost as soon as it came. The colpeurynter was used, but discontinued after an hour or two. She remained in bed for two weeks, when she again had a profuse hæmorrhage. The nurse was with her and used the colpeurynter, which was left *in situ* for nearly thirty six hours. It brought on labor, and when I was satisfied that delivery could be accomplished, Dr. Earle was called in to assist. We collapsed the colpeurynter, and I introduced my hand and found the bag of waters presenting. I ruptured it and succeeded in introducing the forceps and rapidly delivering. A living child was extracted, and it survived twenty-four hours, when hæmorrhage occurred at the cord. Every effort was made to save the child's life, but it die d ofthe hæmorrhage. In this case the uterus was thoroughly washed out and the woman put on fluid extract of ergot for two weeks. She made a satisfactory recovery. I saw her subsequent to her recovery,found a double laceration of the cervix, and repaired it.

The third case was one of central implantation. The first hæmorrhage occurred at the end of the sixth month of gestation, the day after I saw the case I have just reported. I was very suspicious, of course, and made a careful examination. Dr. John A. Robison, who lived near by, was called in and agreed with my diagnosis. The husband, a very intelligent man, was instructed how to use the colpeurynter, and I determined to let the woman go to seven months of gestation in order to save the child, if possible. No further hæmorrhage until the seventh month, when, while walking about the floor, she had a gush of blood. The husband being present, placed her on the bed, and introducing the colpeurynter, inflated it with his mouth. I found it well distended, but increased the distention of the bag and left it in for twenty-four hours. The urine had to be drawn and the bowels were pretty well pressed upon. The woman suffered considerably and was given morphine hypodermically. At the end of twenty-four hours she had expulsive pains, the colpeurynter was pressed down on the vulva, and I thought it time to deliver. In this case I had to tear off the placenta; finding a transverse presentation, I delivered by the feet. The child was born alive and lived for nearly thirty-six hours.

The fourth case I saw in consultation with Dr. Davis. He came to me in the night, stating that he had been called to a woman with a severe hæmorrhage, that she was seven months pregnant, and that he suspected placenta previa. When I got there I found the woman pretty well exsanguinated. The tampon was reinforced and the doctor and I stayed three or four hours, until we were satisfied delivery could be accomplished. He introduced a hand into the vagina, and, tearing away a portion of the placenta, reached the feet of the child, turned and delivered it. The woman was so exhausted that we thought it best not to use any after-treatment except to save life. She was given hypodermatic injections of whisky, ergot and opium. She made a satisfactory recovery.

The fifth case was a marginal implantation. The woman went through eight months of pregnancy, and

in the first week of the ninth month was taken with a sudden hæmorrhage. I made a careful digital examination, but found no evidence of placenta previa. About a week afterwards she had a second and severe hæmorrhage, and a neighboring physician who was called immediately introduced a tampon. I was sent for, and finding the tampon incomplete, reinforced it, packing the vagina full of borated cotton. The tampon was left in thirty-six hours; it brought on labor, and I concluded to remove it. I was glad to find the os dilated, the membranes ruptured, and the head engaged in the superior strait, arresting hæmorrhage. This woman had a previous bad history of delivery; this was her third pregnancy occurring in three years. The first delivery was artificial, mutilation of the child being done in order to accomplish its extraction. Her second labor came under my observation. She had an occipito-posterior presentation, and, remembering Dr. Sawyer's suggestion, I rotated the occiput forward several times, but every pain would replace it, and at last I concluded the only thing to do was to apply forceps. I rotated the head forward again, applied the forceps, and extracted the head with the occiput under the symphysis pubis. The child was evidently injured by the forced rotation; it commenced to bleed freely from the ears, and died in a few hours. In this third labor the woman went eight months and a week. After the tampon was removed she made no further progress, although every effort was made to encourage delivery, and finally the forceps was put on and delivery accomplished. She had a miserable laceration of the cervix, which I intend to repair. In this case no attempt was made at washing out the uterine cavity; the vagina was kept disinfected, and the woman made a good recovery.

This is too small a number of cases of placenta previa to base conclusions upon. I simply wish to call attention to four items. The first of these is the great mortality of children in placenta previa. In two of these cases the placenta previa was detected early and every precaution was used to continue the pregnancy up to the seventh month. In both cases delivery was made of living children. One child died from purpura hæmorrhagica at the end of twenty-four hours—a persistent hæmorrhage of blood which refused to clot, although every effort was made to arrest it. The other child died of exhaustion. After diagnosis of placenta previa is made I doubt the wisdom of prolonging the gestation in the forlorn hope of securing the life of the child.

The second item I would call attention to is the immunity of these few women from sepsis. With a deep implantation of the placenta, with torn uterine sinuses, with the probable introduction of septic material into the uterine cavity of each, and antiseptic treatment adopted with but two, still not one of the five presented the slightest evidence of sepsis.

The third point I would call attention to is the value of the colpeurynter. This was used in two cases. I doubt if it is possible, in the emergency of hæmorrhage from placenta previa, to otherwise properly tampon the vagina. The hæmorrhage is too profuse and the haste required too great. In addition there is a risk of sepsis being introduced with these hasty tampons. On the other hand, it is the simplest thing in the world to slip the collapsed bag into the vagina and inflate it. In addition to the ease with which it is introduced, I would call attention to the complete manner in which it arrested hæmorrhage; the elastic rubber bag fitted close to the walls, and it gave as little pain as any tampon could. It is removable almost instantaneously, and I think it is *par excellence* the tampon for placenta previa.

The fourth point I would make is the cause, as far as these cases show, of this deep implantation of the placenta. The first patient, the doctor told me, had had one pregnancy, one miscarriage and a second pregnancy in thirteen months; the uterus was kept constantly at work, and no opportunity given for the full repair and healthy condition of its mucous lining. In the second case I had delivered the woman but nine months before she had her second child. Thus impregnation had occurred two months after the instrumental delivery of the child and the tedious getting-up of the woman. In the third case I have always confined the lady, and she has had five deliveries, one miscarriage at four months and one at six months, and has not been married eight years, so that her uterus has been constantly active. The fourth case, the one occurring in the practice of Dr. Davis, was a first pregnancy. In the fifth case there had been three deliveries, all artificial, all painful, all occurring in three years. So I should say that frequency of functional activity and imperfect repair of the uterus is a common cause of placenta previa.

The fifth point I would make is that forcible delivery and the peculiar condition of the internal os almost necessitates cervical laceration. All five suffered from this accident. I have a case at present in the Presbyterian Hospital, a lady who was delivered by another physician seven years ago, under placenta previa. She came to me for operation. I found a double laceration of the cervix opening up to the internal os. In every case that has come under my observation there have been one or two lacerations due to the anatomical condition and the forced delivery of the woman.

Dr. W. W. Jaggard.—Gentlemen: None of you have deemed it best to make any remarks by way of criticism upon my paper. Now, this is the most powerful criticism you can make on it. I am not sensitive, however, so I will let that go, and, inasmuch as you have not criticised my paper, I am going to heap coals of fire upon your heads by making a few remarks on yours. But before doing so I want to call attention to the propositions I laid down in placenta previa. First, there is no such thing as an expectant plan of treatment in placenta previa. With the separation of the placenta hæmorrhage is inevitable and not accidental. If you admit that fact, there can be no such thing as expectant treatment. The natural history of the course of placenta previa, clinical experience, the most respon-

sible and authoritative opinions, alike condemn the expectant plan of treatment. A concrete example of this is the case which has been cited in which the expectant plan of treatment was practised, and the woman became very nearly exsanguinated during seven hours of hæmorrhage. I think this is an example of the folly of temporizing, and not an example of the evil effects of chloroform. It was the loss of blood and not the use of chloroform that caused the woman's death. It was the temporizing plan of treatment, and not the anæsthetic. That opinion is formed from the doctor's account of the case.

Second, as soon as the diagnosis of placenta previa is made it is the duty of the practitioner to terminate pregnancy as soon as possible, and remain with his patient until that pregnancy is over and the woman out of danger.

Third, the best plan to use is the combined internal and external version by Braxton Hick's method, the so-called two finger method. Plug the cervix with the breech and then let the case alone; stand by and watch, and if the hæmorrhage recommences just pull on the legs a little bit until the hæmorrhages ceases entirely, but leave the extraction to nature—do not extract yourself. If you do this you will not have the lacerated cervices to which Dr. Knox so feelingly alludes. If you do this you will not have the lacerated cervices from forceps application which Dr. Sawyer mentions.

There is no objection, in the fourth place, in cases of lateral or marginal placenta previa, with the os dilated and dilatable, to rupturing the membranes and letting the head engage and labor occur spontaneonsly; in the event of hesitation or slowness the employment of forceps or version is indicated.

The third proposition, as you see, does away with the tampon, does away with the colpeurynter, and entirely eliminates Barnes' bags, which are an abomination in placenta previa. It is very seldom that you are called to a case of placenta previa where the first condition for Braxton Hick's method is not present. He only requires the effacement of the vaginal portion and a dilatation of the os to the extent of two fingers. It is very seldom in practice that the tampon or the colpeurynter is indicated, but in those highly exceptional cases of primiparæ in whom the vaginal portion is not effaced and the os is not dilated to the extent of two fingers, there is no question at the present time but that the most efficient vaginal tampon is the colpeurynter. But when you use it water should be employed to inflate it, and not air. The arrest of hæmorrhage may be complete, and it furnishes a powerful stimulus to uterine contractions and aids materially in the dilatation of the cervix. The chief objection to it is that the instrument is not always at hand, and, second, that these rubber bags deteriorate with age. In this city I have tested my colpeurynters twice a year, and have had to renew them that often.

I cannot agree with Dr. Knox that the woman in placenta previa has immunity from puerperal infection. I think this is a matter of fact and not of opinion, and, therefore, one may say things in positive terms without being accused of dogmatism. The five cases narrated do not constitute a sufficient basis from which to make any generalization. There is not only no immunity from sepsis, but a very great predisposition to it on account of the atrium for infection being much greater than in normal labor. Indeed, I am not clear that the case of puerpera hæmorrhagica in the babe that Dr. Knox spoke of is not an example of sepsis. I think the opinion is that hæmatophilia is an example of infection of the blood.

In all the cases narrated there have been two faults, —first, the temporizing plan of treatment; second, the extraction of the child either by the foot or by the forceps to the head, without giving nature a sufficient chance to terminate the labor spontaneously.

In regard to Dr. Sawyer's remarks on causation, the Achilles heel of this hypothesis lies just here: It has long been recognized that in placenta previa we very frequently have the cord in the margin, as depicted there; but it has also been observed that the cord is not inserted at the superior margin, but at the inferior margin. Furthermore, as illustrating how exceedingly difficult it is to get hold of a new idea in obstetrics, very nearly that same hypothesis was advanced years ago by Mueller, who recognized in every case of placenta previa an attempt at abortion, although he did not distinctly use the terms rotation of the ovum. The principle involved, however, is the same.

Epidemic influence has been invoked to explain almost every ill to which the human animal, male or female, is subject, but I never before heard of an epidemic influence being invoked to explain placenta previa. I think the ground upon which this invocation has been made is exceedingly narrow and not very deep.

Dr. Knox, in closing the discussion, said: I have nothing further to say, Mr. President, except to report my experience in these cases in answer to the suggestion of Dr. Nelson. I was surprised to find that there was no tendency to post-partum hæmorrhage. I expected an imperfect contraction of the womb. It may be due to the fact I placed my patients on fifteen minims of ergot every three hours for the first two days. There was no more post-partum hæmorrhage in these cases than with a normal implantation of the placenta.

I am inclined to disagree with Dr. Nelson in regard to his statement that the internal os does not contract. I think it does. I took occasion to examine two cases as to that, after delivery, and I found a firm and energetic contraction of the uterus and a tight and firm contraction of the internal os. I think the use of ergot after delivery in such cases is imperative. I think there is a risk of relaxation of the lower segment of the uterus and of post-partum hæmorrhage, particularly where in forced delivery there is in addition laceration. Therefore I think an agent, such as fluid extract of ergot, which will secure and maintain a tight and firm

contraction, should be used for several days after delivery.

Dr. Nelson.—Mr. President, I simply rise to a single statement in reference to the discussion that has been going on regarding the persistence of hæmorrhage. I have seen but one case in which it was at all troublesome, and that case required no special attention; but having seen arterial hæmorrhage in other cases from laceration of the cervix, I threw out the hint that sutures should be put into the cervix when there was hæmorrhage, especially if of an arterial type, as the circular artery, I believe, could be readily lacerated in a case of placenta previa, although I have never seen it.

Dr. H. P. Newman read a report of

Five Cases of Placenta Previa.

Owing to the rarity of this condition—the frequency being computed at about one in one thousand pregnancies—the experience of any one man, except in the large Maternities, cannot be very extensive, but for this very reason is of greater value, since published records bearing upon the subject are meager, though the question has always been one of great controversy. In the following five cases coming under my observation during the past four years, I regret that a more detailed account cannot be given, but the clinical facts are essentially these:

Case 1 (reported to this society at the April meeting of 1886). A central implantation of the placenta, in which no hæmorrhage occured throughout the entire pregnancy until the very last days of gestation.

The patient, Mrs. B., a strong healthy woman of middle age, has borne seven children, and had three miscarriages. With the exception of rapid childbearing, a laceration of the cervix, and one faulty presentation necessitating version, her former history has no particular interest. Ten days prior to delivery at term there was the first appearance of bleeding, which was easily checked by the patient assuming the recumbent posture, and it was not until five days later that the hæmorrhage became at all abundant. Delivery took place on Tuesday, April 13, 1886. On the preceding Friday Dr. R. N. Hall was called, and diagnosed placenta previa, using the tampon.

I first saw the case in consultation with the doctor on Tuesday morning. The repeated tamponing and use of the colpeurynter the night before had had the effect of gradually bringing on labor pains, and softening and dilating the cervix to the diamater of nearly two inches. A digital examination revealed nothing but a thick placental surface upon all sides, covering, as we afterwards found, the entire lower segment of the uterus. By bimanual palpation we made out a shoulder presentation (left dorso-anterior), and decided on immediate delivery.

Every preparation being made to control hæmorrhage, the placenta was carefully separated from its uterine attachments upon the left side, and the right hand carried upward between the membranes and the uterine walls. When the feet were reached the sac was ruptured, podalic version performed, and the child extracted. Meanwhile Dr. Hall had followed up the evacuation of the uterus by firm bimanual pressure through the abdominal walls. The placenta, which was a large one and pretty evenly distributed upon all sides, was separated from its remaining attachments and removed as speedily as possible.

The entire procedure was accomplished in less than five minutes, and the hæmorrhage was not excessive, considering the nature of the case. The child was saved, and the mother made a rapid recovery, being up and about the house within ten days.

Case 2.—Also a case of central implantation. Mrs. W., a strong, hard-working Polish woman, æt. about 35 years, having two living children and two living children and no miscarriages in fifteen years of married life. Former pregnancies and labors normal, with the exception of laceration of cervix and perineum. The first hæmorrhage took place June 11, 1887—seventh month of pregnancy—and was attributed to the exertion consequent upon caring for a sick husband. The flow was not excessive and was relieved by recumbency, uterine sedatives, styptics, etc. During the following six weeks three or four rather copious hæmorrhages occurred at intervals of ten days to a fortnight.

July 26 the woman was delivered of a healthy female child, the medical attendant being Dr. J. C. Pickard. I was called in consultation during the last days of gestation, and, as there was rigidity of the cervix, advised use of the colpeurynter and cervical tampon to restrict flow and excite uterine contractions. These precautions being rigorously carried out, with full antiseptic precautions, a fair degree of softening and dilatation of the cervix was obtained, before the necessity for delivery became urgent, two days later. The bipolar method was employed, and delivery accomplished with little difficulty and a limited loss of blood. It was necessary to introduce the hand into the uterus to separate the placenta from its remaining attachments, which were found to constitute a complete circling of the lower segment of the uterus.

The mother's recovery was rapid, without complications. The child was in every respect a well-developed, healthy infant, in no way prejudiced by the incidents attending its birth. It died, however, some weeks later from cholera, caused by the heat of summer with lack of proper food and attention—like so many others of its class.

Case 3.—I was called to see this patient in the absence of the attending physician, Dr. J. S. Knox, to whose courtesy I am indebted for the subsequent history of the case.

Mrs. A., æt. 20 years, mother of five children. The first hæmorrhage attracting attention occurred November 9, 1888. This and four or five following attacks, covering a period of about six weeks, were controlled by rest in bed and appropriate remedies, until the

morning of December 24, 1888, when more serious flooding necessitated the use of the colpeurynter and use of the tamponade. The ensuiug night the patient was delivered by Dr. Knox of a living child by means of combined version without anæsthesia.

This also was an instance of placenta previa centralis, and I am informed that of the woman's previous labors only two were vertex presentations, the others being brow, transverse and breech respectively. The mother made a prompt and satisfactory recovery, but the child, being a seventh months' fœtus and very feeble, died the following day.

Case 4. April 27, 1888, I was called to see Mrs. S., a middle-aged German woman, then in the sixth month of pregnancy. Had been taken with hæmorrhage a few days previous, but had been kept in bed by a widwife, and the flow had ceased. As cervical canal was intact and rather long, and as child was not viable, it was thought best to temporize, and the usual remedies and directions were given. An attendant was provided and instructed to use the tampon in an emergency. A few days later I was called out of town, and left the case in charge of a neighboring physician.

May 10 there was a recurrence of hæmorrhage with advent of labor pains. The physician in charge could not be obtained, and though some misunderstanding of directions a substitute failed to find the residence of the patient. After eight hours' delay and constant hæmorrhage a local physician was obtained, and he proceeded to operate. Chloroform was administered and the patient died immediately. No attempt was made to remove the child from the uterus.

Case 5.—Marginal implantation; Jewess, 23 years of age. History of one previous labor and one miscarriage. General health poor throughout this entire gestation. Was taken in labor October 21, 1889 about 11 A.M.

As the distance from my house was great, I did not reach patient until late in the afternoon. I then learned from the midwife these pariculars: The first indication of labor—full term—was a bloody discharge followed by pain and rupture of the bag of waters. After escape of liquor amnii the flow was materially lessened, and but little blood was lost from this time on until delivery. An eximination showed edge of placenta attached low down upon right side of uterus,so that it could easily be felt through partially dilated cervix. Subsequent dilatation of os and engagement of head were slow and tedious, but no further trouble was experienced from loss of blood until the final delivery with forceps. The placenta, rather small and of the battledoor type, was adherent and with difficulty detached and expelled. The subsequent progress of mother and child was in every respect satisfactory,and the latter is now vigorous and healthy.

I have but few observations to add. Care should be exercised in the choice of an anesthetic, chloroform especially being a dangerous agent in cases where there has been much hæmorrhage and the patient is exsanguinated and anemic. Case 4 is a sad example of its ill-advised use, and it is probably owing to rarity of the anomaly under discussion that there are not more accidents following the administration of this durg. Certainly, I have failed to find in any published literature upon this subject a word of caution, or any mention of the restrictions to be placed upon its use in placenta previa.

My attention has been called to the possible merits of nitrous oxide gas as applied to these cases, having used it with very happy results upon a patient who had been extremely reduced by hæmorrhages at and following abortion. The stimulating and strengthening properties of the oxygen were very apparent in this instance, and I would urge that it be given a trial in preference to other agents where an anesthetic is indicated.

Again, as to the relative mortality of mothers and children in placenta previa, in former times the fatality to both was appalling. But this was due in part to the fact that prior to the introduction of antisepsis all grave surgical and obstetrical procedures were more liable to terminate unfavorably, and in part to the faulty pioneer methods of treatment. The happy results obtained by some of our modern obstetricians have recently led more than one of them to remark that the terrors of pracenta previa are much overrated. Yet the fact remains that the fœtal mortality is still as high as in the old methods.

The prevalent teaching is to favor that method which offers best result to the mother, "without regard," I quote, "to the life of the child"; and more than one author commits himself to the assertion that it is better deliberately to sacrifice the living child ("and we admit," he says, " that the child is sometimes directly sacrificed by this method") than the mother's safety should be so much compromised in its behalf.

This attitude of obstetrical teachers, and the theory advanced almost unanimously that the only safety lies in immediate delivery, tend to engender a haste and rashness in terminating these cases which savors rather of the *accouchement force*, or forcible delivery, of the early operators, than the judicious application of physiological principles to the indications in individual cases.

Dr. D. T. Nelson.—My experience has fortunately been small in these cases. However, that experience has fixed in my mind the thought that the cause is due to a diseased condition of the fundus uteri, so that the ovum finds its implantation at the cervix instead of the normal position. Laceration of the cervix is, I believe, of very common occurrence, and hæmorrhage after delivery, unless carefully watched, very likely to be serious, even fatal. The treatment of hæmorrhage after delivery has been referred to. While styptics and the like may be desirable, I believe that in nearly all instances it will be found important to use sutures. They can be easily applied by pulling the cervix down where the bleeding vessels can be seen and tied. The immunity from sepsis following has been noticed. It

seems to me there is a sufficient reason for this in the wide-open, non-contracted condition of the cervix: it is not in a condition to contract, as it was not in a condition to dilate previous to delivery, without rupture, and having been ruptured or dilated in some way, it is not in a condition to contract, and therefore does not contract and imprison septic material. Drainage is perfect. Treatment and other points have, perhaps, been sufficiently discussed. Remaining with the patient, as advocated by the reader of the first paper, that intelligent attention may be constantly present, I believe should be constantly emphasized in all discussions on this subject, for fatal hæmorrhage may come on in your absence, as I have known it to do in one if not two cases. A patient who is the subject of placenta previa should be constantly under the observation of an intelligent person.

SELECTIONS.

FOOD.

By Louis Barkan, in "Health, and How to Preserve It."

[continued.]

Fatty Substances and the Carbo-hydrates.

Fatty substances and the carbo-hydrates are to a certain extent the heat producers of the human body, while albuminous matters may be said to build up its machinery, the muscular system. Since the work of a muscle is performed by the combustion of substances rich in carbon, a large amount of such substances, in the form of fat, sugar, and the starchy foods, should be eaten by those who do laborious work. As, from the different portions of a steam engine small particles of iron and other metals are continually rubbed off by use, and repairs are thereby made necessary in course of time, so in the human system the albuminous substances which compose the muscular apparatus are gradually consumed and albuminous food must be eaten to replace them.

The fatty substances which we add to our food, such as butter, lard, and oil, do not merely serve as nutriment, but play also an important part in the production of heat and muscular power. It has been established by experiment that starch is converted more easily into sugar when it is taken together with fatty substances than when eaten alone. Sugar, syrup, honey, and the like substances, serve not merely to improve the taste of food, but like starch, are utilized as nutriments and heat producers, being hydrocarbons in composition. Sugar is much more easily digested than starch. It also increases the flow of the gastric juice, although it interferes with digestion if large quantities are consumed. It also accelerates the digestion of albuminous substances and of those containing iron and lime, by its conversion into lactic and butyric acid while passing through the intestinal canal; and leaves the body at last, decomposed into water and carbonic acid, principally through the lungs.

Iron is a constituent of many articles of diet and also of some beverages. It has been proven that more iron is ingested in this form than the human body requires, since some of it passes out of the body unused with the excretions.

Water and common salt are the two inorganic substances which must be taken in large quantities in order to render healthy nutrition possible. Fully three-fourths of the body consists of water, and salt is a constituent of all its solid and liquid components. But water and salt are not contained in sufficient quantity in the various animal and vegetable articles of food, and therefore we are compelled to salt our food and drink water freely.

The most important function of water in the animal economy depends upon its property of dissolving numerous substances. The water of springs and rivers always contains solid and gaseous matters of various sorts, and our drinking water sometimes furnishes us a sufficient quantity of some of the inorganic matters. Certain mineral waters, especially those containing iron, may therefore act as nutriments or may exercise a curative influence.

The following requirements must be fulfilled in order that a water may be both palatable and healthy: It should be clear and colorless like crystal, even after standing for some length of time; it should show little beads of gas, air, and carbonic acid; it should be almost free from organic substances and the products of their decomposition, namely ammonia and nitric acid. The presence of micro-organisms and of the products of decomposition in drinking water is frequently the cause of diseases like cholera and typhoid fever. Water obtained from the wells in the vicinity of sewers, surface drains, cesspools, cemeteries, and manufactories should especially be avoided, as it is likely to be contaminated from these sources. By providing a pure water supply the sanitary condition of a town or other community may be greatly improved and much sickness averted.

The simplest means of purifying water is by filtering it. For this purpose the best substances are charcoal or a combination of clay and charcoal, because this material has the property of separating from the water all impurities, especially those decomposed materials which give it a bad smell and taste. An inexpensive but thoroughly effectual filter may be constructed in a flower pot, by lining it with a layer of flannel, and then filling in successively three inches of gravel, three inches of white sand washed perfectly clean, and four inches of animal charcoal. A clean sponge may then be placed across the top. Such methods are similar to that followed by nature, where the earth keeps back all or most of the germs and impurities contained in water which percolates through it.

Formerly it was believed that ice could not possibly contain the germs of disease. But Dr. T. Mitchell

Prudden, of New York, has shown that ice, Hudson River ice, for instance, contains almost all those bacteria in an active state, which were originally present in the water. For this reason it is not desirable to put ice in drinking water. When cold water is craved (although cold water really interferes with digestion), it should be boiled and filtered and cooled in bottles on ice.

Milk might well be called white blood, since it resembles blood so much in its composition. It is the only article of food which, when taken alone, will support life. This it does because it contains about thirty-three per cent of blood-forming material, including all those elements which go to build up the human frame.

Human milk is of a bluer white than cow's milk, and has a sweeter taste: it does not turn sour as rapidly as other milk, and it does not form such thick and compact curds: it is much richer in milk sugar, but contains less caseine (the cheesy material of milk), butter, and mineral salts than cow's milk. Ass's milk resembles human milk very closely. Goat's milk is very rich, but does not taste well; this may be remedied by mixing cow's milk with it. Sow's milk is said also to be very nourishing. In order to render cow's milk as nearly like human milk as posible, water, milk sugar, and a little table salt should be added. Whether it is true, as has been stated, that the milk of dark-skinned woman is richer in caseine, butter, and sugar then that of light-complexioned individuals, our evidence is inconclusive. We may mention in this connection that virgins, as well as men, have been known to nurse infants upon the milk of their own breasts.

It has been proved beyond doubt that such diseases as consumption, typhoid and scarlet fevers may be communicated through the agency of milk. It is, therefore, an imperative duty to boil milk before using it, unless it is known to have come from a single healthy cow. The addition of sodium bicarbonate, in the form of baking-soda, or of mineral water containing this substance, seems to render the caseine of milk much more easily digestible; the same result is reached by skimming the cream from the surface after standing for some hours. When drinking milk, it is advisable to take small mouthfuls at a time, and to eat bread with it; by this means the curds of caseine, which are always produced by the acidity of the gastric juice, are prevented from forming in large lumps in the stomach. Milk cannot be said to be easily digestible, but it is one of the most nourishing articles of food, especially when it is rich in butter and caseine.

Meat.—Carnivorous are superior to herbivorous animals, as far as muscular power and the rapidity of movement are concerned. In the same way, we find that races who live on a meat diet principally are superior to those preferring a vegetable diet in muscular energy and nervous power, as well as in power of endurance.

This superiority of persons living on a meat diet is illustrated, for instance, when we compare an American workman with a Chinese coolie, or English sailors and soldiers with those of India, who live on rice and a vegetable diet exclusively. Workingmen whose diet comprises plenty of meat are able to accomplish a larger amount of work in a given space of time than those who consume prnicipally vegetables. Persons who have to do a great deal of mental work know very well that a meat diet is of far greater benefit to them than a vegetable one.

There is a great difference, not only in the flesh of different species of animals, but even in that of different animals of the same species. Animals which do laborious work during life furnish hard, tough, and indigestible meat, the muscular fibres being plentiful in proportion as the fat is diminished in quantity. The mode of killing exercises an important influence upon the quality of meat. The flesh of animals which have been chased to death, for instance, develops a peculiar and very agreeable flavor, due principally to the formation of lactic acid; but it will not keep, because of the presence of this acid. On this account it is best to allow animals to rest for 12 or 24 hours before being slaughtered; the meat will then be much slower in decomposing.

A very pale color in meat is a sign that the animal was poor in blood and that the meat is wanting in nutritive qualities: the cause of the bloodlessness may even have been some serious disease. A deep reddish purple color shows that the animal has not been killed, but that it died a natural death. A marble-like appearance, produced by layers of fat interposed between the fleshy fibres, is possessed by none but good meat. The fat in healthy meat is yellowish, soft, watery, or jelly-like. Good meat feels solid and scarcely moistens the finger, but diseased meat is soft and exudes fluid. Good meat has no odor; diseased meat smells tainted. Good meat shrinks only slightly in cooking and loses but little in weight; while spoiled meat shrinks and becomes lighter, because in disease fat and muscle substance are consumed.

The mode of preparing meat for the table is of great importance. It will be more nutritious and more easily digestible, the more carefully it is prepared; and, moreover, the thorough cooking of meat destroys any germs or parasites which it may contain. It is important that the blood should remain in the meat. This end can best be fulfilled by exposing a piece of meat suddenly to a high temperature, causing the albuminous substances contained in the external layers to coagulate, so that the blood cannot run out. To do this, roast the meat in a very hot oven, at the same time pouring over it frequently hot fatty gravy, which will form upon it a fragrant brown crust. In making strong broth or soup, however, the best plan is to put the meat on the fire in cold water; the juices of the meat will then mingle with the water gradually while it is being heated.

Eggs are, next to milk and meat, the most nutritious and easily digestible food, especially when well cooked and well masticated. They contain, like milk, some

portion of each of the substances which go to form the human frame, and are transformed into blood very quickly.

Fish roe, caviar, the eggs of turtles, and even those of alligators, are used as food, the latter only by some Indian tribes on the banks of the Orinoco; most frequently, however, the eggs of birds and more especially those of the domestic fowl are used. It is said that duck eggs are still more nutritious then the latter, while a duck is said to lay more eggs than a hen, although consuming no larger amount of food. Addled eggs are found to be wanting in transparency when "candled," and are so light as to float upon a ten per cent solution of common salt, while fresh eggs, which contain no putrefactive gases, will sink.

It seems to be established theoretically that the white of a hen's egg is equally soluble in the gastric juice, whether coagulated or only soft boiled. The rapidity of its assimilation, however, is found to depend upon the size of the pieces of coagulated material.

The same is true of cheese. The more fat it contains and the harder it is, so much the more difficult is it to digest. Old cheese contains certain fatty acids which act similarly to strong spices, increasing the flow of the gastric juice. It should therefore be eaten in small quantities as the last dish of a full meal.

Cheese contains more albuminous matter than any other food. At the same time its chemical constitution is such as to ensure the highest degree of nutritive efficiency. One-third of its weight is composed of albuminous matter, mostly caseine, while the remaining two-thirds consists of butter, milk sugar, and other constituents of the milk.

Of the various cereals wheat is the richest in vegetable albuminoids: next to it stands rye: then come rice, sago, tapioca, and arrowroot, in the order named. By combining wheat and rye in certain proportions a very palatable bread may be prepared.

Prime wheat flour should have the following characteristics: When handled none should adhere to the fingers; if a handful be squeezed, it should not sift through the fingers, but should clog together, forming a little ball, which will show the fine lines of the palm for some time after release; if a little ball of flour be dropped on a table, it should even then preserve its form and continuity, at least in large measure. Good flour, although it gives distinctly the sensation of being composed of separate particles, is at the same time soft to the touch. With the blade of a knife it may be spread out on the table in a very thin layer; and, when stirred up with water, the dough will quickly set and become hard. White flour contains much less albuminous matter than those grades which have a yellowish tint, the purest white flour consisting almost entirely of starchy matter.

To keep flour from spoiling, it should be thoroughly dried and stored in bags, not in barrels. It is said that the exclusion of air is apt to render flour somewhat damp and does not yield as good a dough as when the flour remains perfectly dry.

Good bread will not have a sour taste. It must be prepared, of course, only from good flour; It should not show little patches of uncooked flour, the small cavities due to gases generated in the raising should be evenly distributed, and there should be no large cavities nor areas where none exist. The layer directly beneath the crust should not be streaky, and the crust itself should not be black and burned, for this gives a bitter taste: the crust should, on the contrary, be brown, and its taste wholesome.

Bread which contains much albuminous matter (that is, bran) is more nutritious; but that which is light and which contains less bran is more digestible and entails but little labor upon the digestive apparatus. Newly baked bread is less easily digested than bread which is a day or two old, for the latter is more readily penetrated by the digestive fluids. Sick people, therefore, and especially those suffering with affections of the stomach, should confine themselves to the use either of stale bread, or of crackers, zwieback, or toast.

Leguminous vegetable, such as peas, beans, lentils, and buckwheat, are very nutritious because of the amount of albuminoid material which they contain, an amount proportionately larger, in fact, than that found in the cereals, although their composition in other respects greatly resembles that of the latter. The peculiar vegetable nitrogenous principle which is said to contain phosphorus is called legumine. The Chinese, we are told, prepare from peas a certain kind of vegetable cheese.

Potatoes are much less nutritious, especially when served in the form of soup or mush, although they are more easily digested. In order to retain the nitrogenous principle they should be thrown into boiling water; the coagulation of the superficial layers prevent the escape of the nutritive elements, and on peeling just before eating the full benefit is derived. Potatoes which have been frozen are sweet, because rich in sugar. They may be used immediately after they have been thawed, but never when there is the slightest sign of decomposition.

Vegetables and fruit in general do not possess marked nutritive value, with the exception of certain varieties of fruit which grow in tropical and sub-tropical countries, and which contain a large proportion of sugar.

Among beverages certain clarets and sweet wines are of great value in sickness, and still more in convalescence. In moderate doses, they are mildly stimulant and quite nutritious, while at the same time they admit of ready assimilation. White wines and champagne serve principally as stimulants. California wines are very serviceable, and are not so apt to be adulterated as are imported wines. For the same reason domestic wines, as a rule, are the best in every country.

As an article of diet, beer is taken for enjoyment, rather than on account of any nutritious qualities it may possess. In order to be wholesome, it should be thor-

oughly fermented; it should have no sediment, and should remain clear and transparent after standing for some time; it should not taste sour or stale; its foam should be white and milky, with small bubbles, and should last for a long time.

[TO BE CONTINUED.]

THE SUMMER DIARRHŒA OF INFANTS.

As the warm season comes on, we can not shut our eyes to the fact that it is certain to bring with it the yearly summer increase—in some years a little more, in others a little less, but always considerable—of one of the chief obstacles to the survival of infants in this climate. Its onset will tax the resources of physicians, while it wrings the heart of many a parent. If we take account of the continued increase of our population, still largely by immigration, with the helplessness that seems inherent in the great majority of the poor who come to us from other countries, we may congratulate ourselves that much has been accomplished to keep the perils of infant life within reasonable limits. Sanitary officials now occupy themselves with measures more directly of benefit to the community than the gathering of statistics; the controllable causes of diseases are all the time getting to be more and more understood, both by the medical profession and by the people; blind confidence in certain special articles of food is giving way to the feeling that there is nothing curative in any of them, but that their beneficial operation is rather negative than positive, in that they take the place of substances that are apt to prove detrimental; and, thanks to the growth of private as well as public bounty, adequate medical care and hygienic surroundings are furnished each year to a larger proportion of the community. Still, the ravages of summer diarrhœa among young children have barely been mitigated, not decidedly reduced.

The brunt of the battle against it still falls on the family physician, and it behooves him to consider with what greater advantages he can undertake the task now than in previous years. On reviewing the resources at his command, he will be obliged to recognize that only a very few of those that are really effective are strictly medicinal. Some new drugs, it is true, are proving valuable agents, but correct feeding must be our main reliance. The problem of supplying an infant deprived of breast-milk with food sufficient for its nutrition and at the same time free from elements that are prone to give rise to gastro-intestinal disturbance is not to be solved by any grand move; it is to be met only by unremitting attention to a multitude of details, varying somewhat according to the circumstances of the individual case. Undoubtedly a most effective weapon of defense has been placed in our hands by those who contributed to simplify and popularize methods of sterilizing milk, for milk must be given to infants day after day, allowance being made for its temporary withdrawal from the diet under special circumstances. Not less important is absolute cleanliness of every article with which an infant's food comes in contact—cups, spoons, nursing-bottles and the like. It is by the supervision of such matters far more than by the ingenious use of drugs that the physician will be able to carry his infant patients through the perils specially incident to the hot season.—Ed. *N. Y. Med. Jour.*

A MUSTARD PLASTER WHICH WILL NOT BLISTER—HOW TO BOIL AN EGG—DOCTORS AND PATENT AND PROPRIETARY MEDICINES.

V. E. L. gives the following valuable hints in the *Med. World*:

If you want a mustard plaster which will not cause *blister* to form, no matter how long it is allowed to remain, mix the mustard with the white of an egg instead of water, and you will have it. The plaster will be just as efficacious in drawing the blood to the surface, and the patient will not be annoyed while waiting for a blister to heal. If the mustard is too strong add flour.

I believe that 90% of the eggs are spoiled by the cooking. A physician orders a soft boiled egg for his patient; the cook places in the boiling water the egg, and allows it to *boil* for three minutes, takes it out and thinks she has a soft boiled egg, but she hasn't. She has an egg cooked hard on the outside and still raw in the middle. Now if she had first boiled the water, then removed the kettle, and stood it on a piece of old woolen cloth, so the heat would not escape too rapidly, then placed the egg in the water, and allowed it to remain about *six* minutes, she would have an egg evenly and softly cooked throughout, and a very elegant one at that. In our house we always cook our eggs so; one need not be sick to enjoy such an egg.

Allow me to put my medical brothers on the alert for patent and proprietary medicine men. They come to our offices with samples, try to induce us to use them, and order more through our druggist. In this way they succeed in getting them introduced and then they are sold to the public in general by the druggist, with the remark that "Dr. So-and-so uses them in his practice." We have two kinds of wholesale manufacturing druggists in our land. The first class manufacture only standard drugs for the sole use of the medical profession The other class carry on a double business. They manufacture such goods as we want (which they claim are of good quality), visit our offices and introduce their goods in the blandest manner possible, and with the air that their house is the only real simon-pure friend which the doctors have. After leaving their card, their samples, and their smiles behind, they slip around the corner and sell to the druggist two or three assortments of patent or proprietary medicines, which they just as blandly assure him he can sell to the sick without the prescription of any doctor, and thus make on his investment 100%. Of course the druggist buys, and may be

we, in a few days, order goods from the same house, thus supporting the very men who deprive us of our money. I believe it is time that all doctors refuse to use the goods of any house which manufactures any proprietary or patent medicines whatever. There are houses which will not so far violate their rules of courtesy as to do so. They are our friends; the others are our enemies. Let us support our friends. We have it in our power to protect our interests. Let us do so by avoiding any and everything which has the semblance of the patent or proprietary business.

Solubility of New Medicines.—The following table of solubilities of some new medicines may be useful to some of our readers:

One part of	Is soluble in Water.	Alcohol.	Ether.
Antifebrine, - - -	200	10	10
Antipyrin, - - - -	1	1	50
Antithermin, - - -	slightly soluble.	slightly soluble.	slightly soluble.
Cocaine hydrochlor.,	5	10	
Iodol, - - - - - -	5,000	3	1
Paraldehyd., - - -	10		
Pyrodine, - - - -	1	1	
Quinoline tartrate, -	80	150	
Resorcin, - - - -	1	1	
Salol, - - - - - -		5	5
Thallin (sulphate) -	7	100	
Thallin tartrate, - -	10		
Urethane, - - - -	1	0.6	

—*Pharm. Record.*

Patent Medicine Business.—Druggists who understand the evils of the patent medicine business and desire to see the trade divorced from their profession should not permit their names to appear on almanacs issued by the concerns manufacturing the medicines. Druggists who distribute almanacs and other advertising literature with their names on them are virtually endorsing the goods, and so the customers look at it.—— *Western Druggist.*

Excursion to the North.—The Vandalia and Illinois Central Line has on sale cheap tourist tickets to all the cool northern resorts. Call for descriptive pamphlets, rates and other information at ticket office, 100 North Fourth St., or Union Depot, St. Louis.

Bob—"My dad's a squire and gets his name in the paper every day."

Tom (contemptuously)—"That's nuthin'. My dad took Jink's liver pills and got his pictur in the paper." —*Pittsburg Bull.*

USEFUL FORMULÆ.

The New Methods of Treatment in Erysipelas

1. Method of Rosenbach.—Consists in first washing with soap not only the affected part, but the surrounding healthy skin, then applying, each day, a solution of carbolic acid (5 per cent.) dissolved in absolute alcohol. Results, very brilliant as regards both the progress of the malady and the febrile phenomena. The use of absolute alcohol by itself has also produced favorable results.

2. Method of Nolti.—The affected parts and surrounding skin are covered twice daily with mucilage of gum arabic, mixed with from 3 to 5 per cent of carbolic acid. Good results.

Dr. Ebstein mixes the carbolic acid with vaseline.

3. Method of Koch.—By means of a soft brush, we apply a thin and regular covering of the following pomade:

℞ Creoline, - - grammes, 1.
Iodoform, - - - " 4.
Lanoline, - - - " 10.

The parts are then covered with leaves of gutta-percha. This has given good results, especially in erysipelas of the face and head.

4. Method of Nussbaum and Brunn.—Ichthyol, with or without collodion. Results favorable, and very prompt.

5. Method of Hallopeau.—A solution of 1 to 20 of salicylate of soda is soaked in a mask of several thicknesses of linen and applied over the parts, after which it is covered with rubber bands, to prevent evaporation. Relief almost immediate; cure in from three to five days.

6. Method of Hueter.—Injections of carbolic acid in the healthy skin, in doses of from ten to fifteen grammes, distributed in several punctures, at one or two centimeters from the edges of the affected parts, with the following solution, recently prepared:

℞ Carbolic acid (pure),
Absolute alcohol, - aa grammes, 3.
Distilled water, - - - " 94.

Very painful. Only applicable in severe cases of the head or face.

7. Method of Kraske.—Scarify the edges before application of the antiseptic substance.

Dr. Lawenstein advises that the incisions should be made exclusively in the healthy skin, after which the parts are enveloped with a solution of carbolic acid or sublimate.

8. Method of Wolfler.—Mechanical compression by means of adhesive plaster applied on the healthy skin on the borders of the affected parts, so as to completely surround them.—*Le Bulletin Medical.*

ORIGINAL ARTICLES.

ANTISEPTICS—AN ABSTRACT OF THE LITERATURE FOR 1888 AND 1889.

BY SAMUEL W. FRENCH, M.D., MILWAUKEE, WIS.

Read before the Wisconsin State Medical Society at its Forty-Fourth Annual Meeting, June 6, 1890.

Considering the class of drugs known as antiseptics the most important of all materia medica at present, I have chosen the consideration of some of them as the subject for my paper. Antiseptics or antiseptic practice should rank as the greatest advance which has been made during the last half century. But how few men really practice antiseptic surgery! A great many pour, simply, a few drops of an antiseptic solution, without even a pretence of measurement, into a large basin full of water, and lo, the whole is at once transformed into a disinfectant of unquestioned efficacy, that if but the tip of the finger be dipped, the whole hand is rendered aseptic. The class of antiseptics that I shall speak of are those applied more particularly to surgery, as the consideration of antisepsis internally would open a field too wide for the extent of the paper. Antiseptic surgery or aseptic surgery was not unknown to the ancients, although their practice was more empirical than theoretical. The ancients believed first in cleanliness, using sterilized water; second, clean, dry wounds, believing that putrefaction was prevented by keeping them dry; third, alcohol was used in the wound, ligatures with aseptic silk, fine catgut and sulphate of copper, hæmorrhage stopped by warm wine, and the surface was covered with tar plaster, and the vicinity of the wound made thoroughly air proof. Hence you will see they endeavored to make their wound thoroughly aseptic, the very thing that the surgeon of the present day endeavors to do.

In considering the different antiseptics in use, it is well to consider for a moment the methods of their use and the necessary preparation for a surgical operation. It has been found by actual experiment that microbes exist in the air, on the walls and movables of every room, and that by sweeping and dusting their numbers are increased. The movables must, therefore, be taken out of the room, the floor mopped and the walls sponged with an antiseptic solution, the best being found to be corrosive sublimate 1 to 500. The hands of the operator must not be prepared by any ordinary washing. There are two different methods, the first, mechanical washing; wash with ether, and, having thoroughly cleaned the nails, immerse in a mercurial solution. The other method is to first wash with turpentine, then with potash soap, and afterward immerse in a corrosive sublimate solution. The field of operation must be rendered thoroughly aseptic, and this is best done in the same manner as with the hands. By actual experiment, the arm having been shaved, washed with ether, rubbed with mercurial solution and dressed with an aseptic dressing, it has been proven that the surface can be made aseptic. The instruments from cases in well ordered hospitals have been found covered with germs, also those soaked for an hour in a carbolized solution of the strength of 1 to 40. Hence it would seem that the custom of keeping the instruments in a carbolized solution of 1 to 40 is useless; and it is also found that the solution of carbolic acid which has the greatest inhibitory power against microbes is 1 to 20. But we know by experience how disagreeable a 1 to 20 solution of carbolic acid is. It dries the hand, and not only that, but it has a tendency toward destroying the instruments. And I consider that some other solution, like creolin, or much better, intensely hot water, should be a far better solution to render instruments aseptic than the ordinary carbolized solution. It is recommended that the instruments should be baked in a temperature of 150° to 160° C. for an hour. This gives a certain sterilization. Heat and corrosive sublimate are destructive to sponges, and it is considered that Berlin worsted enclosed in gauze make the best sponges. Small catgut and silk ordinarily prepared, are sterile; large catgut never. The best method is to expose them to the heat at 140° C. for an hour, one day in the oil of juniper, and preserve in alcohol 95%. Another method is to first scrub the catgut with a potash soap, then soak it twelve hours in ether, then for a time in a watery solution of sublimate 1 to 1000, and to be preserved in the following solution: Sublimate, 1 part; glycerine, 100 parts; absolute alcohol, 9000 parts. Before using, the gut may be placed in 1:1000 sublimate solution. The room has now been prepared, the field of operation and the hands prepared, and the instruments ready in an antiseptic solution which we will consider for the time to be 2% solution of creolin. There is great difference of opinion as to irrigation. Some consider that it is much better to keep a wound actually dry all the time and use no irrigation whatsoever. Microbes have been found in irrigating nozzles, and irrigating nozzles should, therefore, be unattached and immersed in a sublimate solution of 1:1000 ready for use. The part surrounding the field of operation should then be covered with antiseptic towels, or towels wrung out in a sublimate solution, whereby instruments, when not in use, can be placed, and thereby kept thoroughly aseptic. It seems to me that the best material to come in contact with the wound is hot water or sterilized water; and if it is still considered necessary to use an antiseptic solution, this solution should also be followed by hot water.

Having rendered the wound aseptic, and this we can readily do by means of hot water, it seems hardly necessary to introduce any drugs to fulfil the purpose. It has been the practice for years, with most all surgeons, to rub the interior of the wound with iodoform, and likewise to sprinkle iodoform upon the line of incision.

But late experiments in the laboratory have proven that iodoform has no inhibitory power over microbes, has no germicidal power whatsoever. In fact, the microbes rather seem to enjoy the medium. Therefore, according to the laboratory experiments, iodoform seems to be useless in or about a wound. Dr. H. O. Marcy, of Boston, has a practice of smearing the line of incision with an iodoform collodion, thereby rendering it impervious to the air. But on the argument that iodoform is of no use whatever, it would seem that the smearing of the suture line with simple collodion would do just as well. Iodoform and boracic acid gauze have been found to be non-sterile. The ligatures, as has been said, can be of fine antiseptic catgut, properly prepared; the sutures sterilized silk. The dressing must be sterilized. Baked gauze should be used, which can be made absorptive by saturating with a 10% solution of glycerine, and drying before sterilizing. In the baked antiseptic dressings, however, germs are found after several days of use, the more abundant nearer the wound, which presumably comes from sources beneath the dressing; and the dressing that is germicidal as well as antiseptic is best obtained by using the aseptic dressing containing the glycerine and charged with corrosive sublimate.

Drainage tubes may be used, and it has been found that drainage tubes kept in a solution of carbolic acid 1 part to 20 are sterile. But it is now considered that if due care is taken to stop all small vessels, all serous oozing, by the continued use of excessively hot water and sponging with dry sterilized gauze, using deep retention sutures, the drainage tube is useless, as after applying the absorbent dressings that have been spoken of, it is found there is no oozing and that the wound is kept perfectly dry through the seven or ten days previous to the second dressing.

Heat, therefore, seems to me to be the greatest element toward rendering a wound thoroughly aseptic. Cleansed hands, washed in hot water, cleansed instruments kept in water at 120° F., and the wound kept bathed in water at 110° F., I consider the best method. Bone drainage tubes put up in carbolized oil are open to suspicion. From carbolic acid we frequently get poisoning. Iodoform poisoning in a mild degree is also frequent. Antiseptics are often used to cover our errors. In dry wounds no putrefactive changes take place. The antiseptics now most commonly used are carbolic acid, heat, corrosive sublimate, creolin, biniodide of mercury dissolved in iodide of potash, boracic acid, double cyanide of mercury and zinc, styrone.-Carbolic acid is becoming less and less used. Cases of carbolic acid poisoning are more easily recognized, and it has been found that the so-called black urine of carbolic acid does not necessarily appear immediately after passing, but sometimes does not appear for an hour or so after it is voided. Hence oftentimes certain cases of poisoning by carbolic acid are overlooked, and the symptoms attributed to other causes. Billroth has reported four cases of injury to the finger, that have become gangrenous through the uncalled for application of carbolic acid. The best antidote is soap taken internally and repeatedly until all symptoms subside.

R. B. Warfield, of Baltimore, reports gangrene from the use of carbolic acid, and makes the following conclusions:

First, carbolic acid applied to a skin surface may bring about rapid death of the part. The strength of the solution employed seems to be of less importance than the length of time of its application. The employment of a strong solution should be condemned, and also a very dilute solution when continued for a considerable time. As I have said before, heat seems to best fulfil the conditions for aseptic surgery. The sublimate solutions, as a rule, are too strong, producing undoubtedly sublimate poisoning, and thereby increasing the danger to our patients by its use. A sublimate solution of 1 to 10,000 parts of water has been found to have sufficient inhibitory action.

Dr. H. J. Garrigues collects twenty-two cases of death from mercurial poisoning. If corrosive sublimate is used as an intra-uterine injection, it should always be followed by hot water, thereby lessening the possibility of sublimate poisoning. There are many cases of mild sublimate poisoning, such as watery stools, with pain and tenesmus, without salivation and albuminuria, especially when the sublimate has been used in obstetric practice. Corrosive sublimate combined with chloride of ammonia renders both more antiseptic and much less irritating, and makes a composition known by Sir Joseph Lister as sal alembroth. It is exceedingly soluble; washed out by the discharges is liable to become irritating to the wound. Sal alembroth is a double salt of bichloride of mercury and chloride of ammonium.

The Cyanide of Mercury.

This is inhibitory in 1 in 10,000, capable of destroying at 1:1000. However, it is highly irritating, and has been found to be useless on that account as an antiseptic.

Creolin.

Creolin is a product of the dry distillation of certain kinds of English coal. It occurs as a dark brown, syrupy fluid, and has a strong tarry odor. It mixes well with water, oil and glycerine, and is soluble in alcohol. Prof. H. B. Hill, of Harvard University, on analysis, finds it is a mixture of sodium salts and some resinous acids, and the part of oil of tar known as iron oil. Creolin is a secret preparation. It contains besides other coal tar bases, 18% of naphthalin, no carbolic acid. Esmarch considers this equal to carbolic acid. Creolin gauze proved to remain aseptic for months, being a great advantage over iodoform. It is said to be non toxic in use, from 5 to 15 grains three times a day being given in diseases of the stomach and intestines, accompanied with excessive putrefaction. Dr. L. A. Stimson reports favorably on a 2% solution. Eisenberg reports 2 to 5% powerfully antiseptic, killing immediately streptococci, staphylococci, cholera bacilli and other bacteria. Hunerman reports a long series of

investigations, and states it retards the growth of bacteria, but does not kill them. Kertum and Busen consider it an admirable obstetric antiseptic in ½% solution. Eisenberg, in Vienna, tried it with buillon cultures, streptococcus, erysipelatous staphylococcus, pyogenes aureus, and the result was in favor of creolin over carbolic acid, even in cases of anthrax bacillus. Parks considers it germicidal in from 1 to 200 and from 1 to 1,000.

Prof. Sedgwick, of Massachusetts Institute of Technology, performed the following experiments: With diluted sewage, containing 1,400 bacteria to each cubic centimeter, creolin, 2%, was added. There was no growth; ½% to a solution of pepsin, containing 6,435 bacteria to each cubic centimeter, stopped all growth. Lormuscan makes the general statement that the germicidal power of creolin is ten times that of carbolic acid; action on the spores is more pronounced. It is a hæmostatic of no small value. A 5% solution destroys pathogenic bacteria. Creolin soap disinfects the hands more thoroughly than bichloride. Creolin does not injure hands and instruments. Two solutions are used, a 2% solution for the hands and body of the patient and instruments, and ½% solution for irrigation. In obstetrics the bichloride of mercury solution has been abandoned on account of the danger from poisoning.

Minapoulus reports the successful use of creolin in obstetrics—140 cases, two severely infected, one died; nineteen less severely. He considers it a valuable substitute for corrosive sublimate and carbolic acid, as it possesses all their advantages with none of their disadvantages. The septicæmia of intra-uterine origin is ameliorated by the use of creolin where the sublimate and carbolic acid fail. The only objections to the use of creolin is an insoluble tarry residue which deposits itself on the sides of the vessels and the instruments when the solution is undisturbed for some time, and the possible occurrence of eczema from its use. These are the only practical objections. The price is the same as carbolic acid. It can be used to wash out the pleural cavity, and likewise the abdominal cavity. Pleural cavity injections $^1/_{10}$ to ½%. It is a stimulus to unhealthy wounds. Sloughs separate quickly. The preparations are creolin gauze, 1 to 5%; cotton, 1 to 5%; jute, 1 to 5%; lint, 1 to 5%; powdered with boracic acid, 3 parts to 100; oil, 2%. It is a thorough deodorizer of icdoform. It is said to be similar in appearance and odor and mixture in water, to phenyle. Amon advocates the use of ¼ to 2% solution locally, and inhale, in ophthalmic disease, diphtheria and pulmonary tuberculosis. Otorrhœa, 5 drops to the pint; diphtheria, 100 to 500 parts of water as a gargle. Tuberculous laryngi tis, 1 to 1000 inhalation. Douching the nose, 3 to 5 drops to the pint.

Biniodide of Mercury.

Biniodide of mercury is irritant. The material is washed out. The iodide of potash combined with it renders it soluble. Trelat, of Paris, uses biniodide of mercury in the following solution: Water, one quart, twenty grammes of alcohol, iodide of mercury one decigram, iodide of potash, three centigrams. The iodide of mercury is somewhat decomposed; forms an iodated iodide of mercury. He has had three years of experience with it, and considers it as efficacious as the solution of sublimate of 1-1000, and less irritating. The biniodide of mercury was brought to the knowledge of the American medical profession by E. P. Bernary, of Philadelphia. He considers it less poisonous than corrosive sublimate, and more powerful. A solution of 1 to 4,000 destroys better than the sublimate 1 to 2,000. Crasowski concludes that a solution of 1 to 4,000 is an efficient antiseptic, and less irritant than bichloride. It is, however, expensive. In biniodide of soap solutions, germs would not be seen after the lapse of four days, and other soaps did not prevent the formation. Carbolate of mercury soap is less powerful. Biniodide is not soluble in water. It is soluble in excess of sublimate or excess of iodide of potash. It is put up in the form of small pellets, one of them to a pint, making 1 to 1-4000, and it is used to wash out the uterine cavity.

Last November Sir Joseph Lister, the father of antiseptic surgery, delivered a truly masterly and scientific discourse upon his experiments and researches for the last five years in antiseptics. After searching during this time for a thorough antiseptic, unirritating, and, at the same time, thoroughly germicidal, or inhibitory, rather, in its power, he finds that the double cyanide of mercury and zinc is the best. The double cyanide of mercury and zinc gauze is thus prepared:

The cyanide powder is mixed with a strong starch solution; powdered sulphate of potash is then mixed with it, which, after drying, is powdered, and the gauze charged with it. The material is then diffused into 1 to 4000 solution of bichloride of mercury, and is an inhibitor, but not a germicide. It is unirritating, and in excess is not injurious. There is a possibility that the cyanide of zinc is antiseptic, there being very little mercury found in the powder. By experiment it has been found to be inhibitory for four days in blood serum. No other antiseptic has ever given that.

There were three culture tubes put aside for experiment. First, gauze combined with the cyanide of zinc; second, gauze with the double cyanide of mercury and zinc, and third, unprepared gauze. The streptococcis capable of producing fermentation, together with other bacteria, were the medium for inoculation. In four days the unprepared gauze was putrefactive. That with the cyanide of mercury showed an acid fermentation, but no putrefaction. That with the double cyanide of mercury and zinc, in eight days, no putrefaction, but an acid fermentation proves that the mercurial element in the composition is valuable. Composition of the salt not known. Double cyanide of mercury and zinc 3% present in the gauze. In actual practice the few layers placed next to the wound are washed in carbolic acid to prevent the sublimate from irritating.

Mr. D. B. Dart, of Edinburgh, in the *Lancet* of November, 1889, casts some doubts upon the composition of the so-called double cyanide of mercury and zinc. He remarks that it is almost the invariable rule that when a soluble and insoluble cyanide and iodide unite to form a double salt, the product is soluble. He thinks that it is not surprising to find the new antiseptic which has been prepared in the presence of water and has been washed, to consist of zinc cyanide. It is just possible that the mercury is not present as a cyanide, but as an oxide. The powder of the double cyanide of mercury and zinc rubbed into the hair renders it aseptic.

Turpentine is actively antiseptic, and has the power of penetration of $^3/_5$ of an inch. Any one who has used this substance in the treatment of carbuncle will readily understand how the process is stopped by plugging the different centers of suppuration with a small piece of cotton saturated in the oil of turpentine.

Acetic acid is spoken of as a good antiseptic in gynæcological practice, in solutions of from 5 to 7%. It is hæmostatic, non-poisonous and does not injure instruments. G. Martens gives the following relative power of antiseptics: iodine, 1 to 10,000; iodoform not able to hinder growth; thymol, 1 to 500, destroys immediately; 4% solution boracic acid requires ten days; sublimate, 1 to 1,000, 60 minutes; 1 to 100 instantaneously.

The last preparation I have to speak of is styrone. It is made from liquid storax and balsam of Peru, and has been used for the last 11 years by Dr. H. H. A. Beach, visiting surgeon of the Massachusetts General Hospital, and in an article published in the *Boston Medical and Surgical Journal*, for August, 1889, he gives the results of his experience in its use. He finds it a most thorough deodorizer of foul and offensive wounds and ulcers, and non-poisonous; suggests the reason of its employment from the effectiveness of the balsams in antiquated and modern surgical dressing. To a raw surface, pure styrone is somewhat irritating, but in the form of an emulsion with olive oil, water, or liquid vaseline, it may be applied freely to open wounds. It is readily applied to the pleural and peritoneal cavities without danger. On the bacteria of putrid meat it seemed to have but slight inhibitory action. On anthrax spores it was incapable of killing. On the bacillus of Asiatic cholera, samples taken 24 hours after the addition of styrone contained no bacteria. It had an inhibitory power over the streptococcus pyogenes and the staphylococcus pyogenes aureus. In the washing out of the pleural and abdominal cavities, and in empyæma of the thoracic cavity, he used it with signal success. Shortly after the publication of this paper a case of empyæma with foul-smelling discharge came into my hands. A solution of 1 to 100 of styrone was used as an irrigation. The foul smelling discharge disappeared in a few days and the cavity was closed in six weeks from the time of its first opening. I have had a number of chances during the year to test it as to its action upon pus-secreting surfaces, and find that it has an undoubted influence over it, and is a most thorough deodorizer. I have now under my charge an empyæma of the thoracic cavity which has been open two years, and four injections, three of 1 to 100 and two of 1 to 12, have entirely stopped the discharge. There is but one disadvantage in the use of styrone: It is extremely expensive, and quite scarce. The following are some of the mixtures for its use:

For a spray for cancerous growths: Styrone, 1 drachm, glycerine, 1 ounce, distilled water, 1 ounce. It can be made into an emulsion with olive oil, water or liquid vaseline. May be used in the pleural and peritoneal cavities in 1 to 200, 1 to 100 and 1 to 50. One to 12 disinfects a foul, ulcerating surface. In form of spray, styrone 1 drachm, glycerine 1 drachm, distilled water 22 drachms. Throat and nose spray, styrone, 10 drops, glycerine, 2 drachms, distilled water, 4 ounces; or styrone, 5 drops, liquid vaseline, 2 ounces. It being of an oily consistency, it is found difficult to render miscible in water without the addition of some other agent; and to accomplish this purpose glycerine has been found to be the best agent. Both the styrone and glycerine are heated and rubbed together, and the water being also heated, is then added to the styrone and glycerine mixture. This forms an even emulsion, which does not separate upon standing.

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Note.—Since writing the above I have again had the satisfaction of successfully using styrone 1 to 12 in a case of abscess of the abdominal walls following laparotomy. Two applications of the solution stopped all discharge where sublimate 1 to 4,000 and creolin 5% had failed.

"God and the doctor we alike adore;
Only in danger—not before;
The danger over, both alike are requited,
God is forgotten and the doctor slighted."—*Ex.*

REPORT ON PROGRESS.

NERVOUS DISEASES.

BY FRANK R. FRY, A.M., M.D.

Alcoholic Monoplegia.

In the *British Medical Journal* for June, 1890, Thos. Buzzard reports some interesting cases.

The clinical characters of alcoholic neuritis have now become universally known as ordinarily seen. But there are occasionally unusual cases, i. e., instead of a general multiple neuritis of a greater or less intensity, causing, as the case may be, a general slight paresis or profound paralysis of all the extremities, we occasionally see circumscribed or localized paralyses, monoplegias. The symptoms thus produced are sometimes quite confusing. Hence the interest attached to Buzzard's well-selected cases, some of which we subjoin:

In the following case neuritis (presumably from alcohol) was confined from the first to the district of a single muscle:

A gentleman, æt. 29 years, was sent to me by his medical attendant with paralysis of the index, middle, and, to a less extent, of the ring finger of the right hand, which had been observed for three weeks. The patient was a paroxysmal drinker, and had just come out of a debauch of several weeks. The hand presented just the appearance of an early stage of wrist-drop from lead. There was no blue line, and no history of exposure to that metal. The faradic excitability of the extensor communis of the right arm was lessened. The hand felt numbed. There had been no pain in the arm. There was no sign of lesion in the other arm or in the lower extremities. The knee-jerks were present and equal. Under treatment, chiefly by abstinence and with slight application of electric currents, he quite recovered in six or seven weeks.

In another example the lesion was confined to the brachial plexus of one side:

A gentleman, æt. 22 years, came to me from a medical man in the country. His right arm hung helpless. It was exquisitely tender to the touch, full of pain, and presented a sodden appearance. Pains had begun in the arm some weeks previously. For some two or three years, I was informed, his habits had been most intemperate, and he had been on the verge of *delirium tremens* when the attack of brachial neuritis began. At first its occurrence appeared to check the development of the symptoms of delirium, but when he returned home he was in a half maniacal condition, which prevented an exact examination of the arm being made. He had been then treated with salicylates, bromides, iodides, arsenic, and quinine. Under antipyrin, grains 25, and extract of Indian hemp, grain ¼, three times a day, he soon began to have less pain and tenderness. In a fortnight he looked very much better, and was free from pain. I heard later that he had quite recovered.

A female patient was brought to me on account of loss of power in the right hand and greatly impaired vision. I found the right grasp diminished in power. The two middle fingers were especially weak, and tended to drop. There was no cutaneous anæsthesia. She had suffered from what she called "rheumatism"—sharp shooting pains in the feet and across the instep—for years, but had had no pain in the arms. In the course of the last six years she had had on three occasions an epileptic fit. The difficulty of vision was peculiar. At first it strongly suggested hemiopia. Looking at the word "holding," she could read "hold" only. After a pause and apparently readjusting her gaze, she saw the remainder of the word. Facing me, she could see my right eye clearly, my left but very indistinctly. Yet on holding up my fingers, and testing the field of vision, I could discern no impairment of the extent to which she could see to her right and left. It appeared, therefore, that she had a scotoma just to the right of the centre of the visual field. Her tongue appeared slightly inclined to her right. This last symptom, coupled with the suggestion of hæmiopia, paresis of the right arm, and the history of fits, might easily lead to a diagnosis of intracranial disease. But close investigation did not confirm this.

The extensor communis muscle of the right arm showed distinct lowering of excitability to both faradism and galvanism, but especially to the latter. This could not result from an intra-cranial lesion. It pointed to an affection of the "spinal" nervous system, and was most probably due to peripheral neuritis. (The word "spinal" connotes, of course, the spinal nerves as well as the cord.) There was a history of alcoholism. I was disposed to refer the scotoma to periaxial neuritis of the optic nerve. The patient recovered completely in a few weeks.

I saw quite recently in consultation a lady, æt. 64 years, who a fortnight previously had entirely lost the use of the right arm. Investigation of the cause of this monoplegia excluded a traumatic origin. The tendon reflexes in the other arm and in the legs were good. In the right arm they were absent. There was total inability to move any muscle of the right upper extremity, including the shoulder, together with anæsthesia of the hand, which decreased shortly above the wrist. Pain of excruciating character, especially bad at night, was described as affecting the right arm. It was as though the "limb were being torn out of its socket on a rack." I had not an opportunity of testing the faradic excitability of the muscles, which were very flaccid, but the other symptoms are sufficient to show that the lesion was probably a neuritis of the brachial plexus. The patient was described as not having been sober for a year past.

These examples, I have thought, would prove interesting and valuable, as tending to show what has not yet, so far as I know, been advanced respecting the influence of alcohol, that its effects may appear, not only in the more common form of a generalized paralysis of

the extremities, but in lesions of a peculiarly localized character. If I am right in the view that these are examples of localized neuritis due to alcohol, it is evident that we shall have in future to bear this possibility in mind when we meet with neuritis of single nerves or plexuses, of the cause of which we do not find a ready explanation.

The Administration of Arsenic.

The New Orleans *Medical and Surgical Journal*, April, 1890, contains the following:

"In a lecture before the University of Toronto Medical Society, Dr. E. C. Seguin said that many instances of the unsuccessful administration of Fowler's solution were due to the error of recommending the drug, after the symptoms of poisoning had manifested themselves, with the original dose. If the child had been taking from ten to fifteen minims of Fowler's solution three times a day, and the symptoms of arsenical poisoning were induced, the dose should be increased up to thirty minims. It is peculiar that after the arsenic is thus recommenced, symptoms of arsenicism do not recur. He also lays stress on the free dilution of the arsenic. It need not be taken at one draught, but may be sipped during the hour after the meal. But in one case he has seen herpes result from its administration. The urine should be examined from time to time for casts."

Only those who are used to giving arsenic in large doses to large numbers of patients can have a fair idea of what large amounts of it are tolerated in certain instances and how possible it is to create a tolerance for large doses in many instances. On the other hand it is only such persons who know the difficulties not infrequently met in administering the medicine to certain other individuals.

With every patient to whom we attempt to give arsenic in increasing doses great watchfulness and care should be exercised, otherwise with a run of cases that tolerate the drug well, one may easily get into careless habits in its use, against which too much caution cannot be urged.

If used properly many cases of chorea do not need much arsenic to arrest the attack; others, before we may determine the value of the drug in the individual case, will have to receive very large doses. These facts must always be kept in mind, for there is no advantage, sometimes there is disadvantage, in giving more of the drug than is needed. On the other hand we are certain that the drug is abandoned in many cases without receiving a fair trial.

Nuclear Vacuolation in Nerve Cells of the Cortex Cerebri.

An interesting and suggestive paper under the above title appears in a recent number of *Brain*, from the pen of James B. Whitwell. We quote the greater portion of it:

"In certain of the lower animals, notably the torpedo, there are large ganglionic cells in the brain, which closely resemble the motor-cells of the human spinal cord. In these the nucleolus is of large size, and stands out in strong relief as a highly refractile, spherical body, and conceals one or mere, rarely several, vacuolæ. And this condition Max Schultze considers to be the normal form of the nerve-cell nucleolus in the torpedo. However this may be, there seems scarcely evidence that such a condition obtains in the normal nerve cell of the human cortex.

"Vacuolation of the nucleus and nucleolus of nerve-cells in the cortex, however, is present in a very marked degree in certain pathological conditions. More especially does this occur in certain cases in which dementia was a prominent feature during life, particularly the dementia resulting from epilepsy of prolonged duration.

"The condition is usually most marked in the cells of the fronto-parietal region, and of these parts the deeper layers of the cortex, especially the larger pyramidal cells in these regions, but also present in the smaller pyramidal cells, and even occurring in detached nuclei. On examination of fresh specimens stained in aniline blue-black, after a treatment with osmic acid (Bevan Lewis) and it is in specimens prepared by this method that the condition is seen best, even under the low power, it is evident that certain of the nerve-cells of these layers are deficiently stained, and in some of them the usually well-marked, deeply stained nucleus is apparently absent or can only be seen as an irregularly shaped, more deeply stained portion of the cell. The branches of these cells are frequently noticeably deficient, both in quantity and staining, the latter perhaps being a cause of the former appearance.

"Under a higher power it is seen that these cells, though not deeply stained anywhere, are frequently stained in a "patchy" manner, a portion near one or the other edge frequently reacting to pigment better than the crest of the cell. At the same time in many cases the sharply defined angular contour of the healthy cell is replaced by a bulging appearance.

"This deficiency in staining, quality and somewhat swollen condition of the cell, however, appears rather to be related to the presence or absence of pigment in the cell, since this condition seems in most cases to precede the deposition of the pigment in the condition known as pigmentary degeneration. The nucleus of the cell may present a great variety of conditions.

"In almost all the nuclei in which vacuolation has commenced, or is about to commence, the sharply defined, well stained angular appearance of health is lost. In some cases the whole nucleus is swollen up to form an oval, rounded, or pyriform mass, and is either as a whole badly stained, but more so at the center than at the periphery usually, or several well defined patches of a lighter hue appear in the swollen nucleus.

"In other cases a pale, poorly stained, but sharply defined vacuole is detected in its center in the position of a nucleolus; in fact the nucleolus is swollen up and be-

comes distinctly vacuolar. In this latter condition scarcely any alteration may be evident in the body of the nucleus.

"In other cases, again, in addition to the sharply defined vacuolar nucleolus the body of the nucleus surrounding it is in a parallel condition, swollen, lightly stained, and in parts, not stained at all.

"In other cells the nucleus may be occupied by several vacuoles, varying in number from two to five; in the latter case the position of the nucleus being entirely occupied by a small bunch of these vacuoles.

"A still greater degree of vacuolation is that in which a signet-ring-like appearance is produced in which the position of the nucleus is occupied by one large vacuole with a small one on one side of it; in this case the small vacuole may be so compressed by the larger as to form merely an unstained line in the capsule of the larger one."

The Pathology of Chorea.

The current number of *Brain* contains a paper by Dr. Chas. L. Dana, New York, in which the writer makes a valuable analysis of the reports of post-mortem examinations of chorea. He says:

"I find there are on record nearly 200 reports of autopsies made upon patients dying of, or with acute or chronic chorea.

"The large majority of these are of no value whatever, so far as the (microscopic) observations on the nervous system are concerned. * * *

"In excluding from my table so many records made, in many instances by careful observers, I do not mean to deny their value. These observations have shown in a general way that in death from chorea, congestions, extravasations, embolisms, and softenings exist in the nervous system. They have also proved the great uniformity of heart lesions. It is, however, only by a very minute and careful microscopical study of cases that any light upon the neuro-pathology of chorea can be obtained.

"From a critical analysis of the list of reports (200 cases), I can find only thirty nine cases which give a satisfactory account of the nervous system. Even here in some instances the examination is not perfectly complete."

Concluding, he says: "In fine, we have in chorea, first a vaso-motor paralysis and trophic disturbance, affecting certain areas of the brain, and to a less extent of the cord. Then we have this becoming chronic, with connective tissue, hyperplasia, and degenerating changes in ganglionic cells and fibers.

"As for the localization of the lesion, the earlier English writers all looked for it in the basal ganglia and their findings are perhaps a little biased by the expectation of seeing something in these localities. In some autopsies only the cord and basal ganglia were examined. We cannot, however, locate chorea in these places exclusively nor in the globus pallidus, nor in the cortex. It is rather a disease of the intracranial motor tract, including its starting point in the cortex, and especially in its co-ordinating adjuncts, the lenticular nucleus and thalamus."

Magnesia Isinglass as a Substitute for Plaster of-Paris.—Dr. Josef Englisch states in a communication to the *Wien. Med. Woch.* that in his experience isinglass is preferable to plaster-of-Paris for rigid bandages, on account of its lightness coupled with extraordinary firmness. It is, according to the author, especially adapted to cases in which the patient is intended entirely or partly to follow his usual occupation. Its disadvantage is that it takes a long time to harden, and he mentions this as the reason why it has not yet been generally adopted. To obviate this disadvantage, he has used for the last eight years magnesia isinglass, for which he claims excellent results. Four parts of a solution of soda isinglass are by slow boiling reduced to the consistence of thick syrup, and then triturated with one part of finely-powdered magnesia, till the mixture becomes whitish with a slight yellow tinge. The unrolled bandages are laid in this pultaceous mass, well stirred in it, and then carefully rolled upon a wooden roller. The prepared bandages must not be exposed to the air for more than fifteen or twenty minutes, and before their application the limb is covered with a double layer of ordinary calico bandage. No cotton-wool or flannel must be used. Four or five layers of the magnesia isinglass bandage are sufficient for the arm, but five or six layers are required for the lower extremity. When the apparatus is intended to remain undisturbed for a longer time than is usually the case, slips of the same material, or of thin leather or card-board, may be inserted between two successive layers; not all together, as this would interfere with the adhesion of all the layers. From ten to twenty minutes after its application the apparatus ceases to be sticky, and in from three to ten hours, according to the temperature of the room, it is perfectly hard. It is easy to cut, remove and reapply the apparatus, so that it does not interfere with other therapeutic measures.—*Lancet.*

In a case of syphilitic tubercles on the face which resisted ordinary specific treatment, Woodbury (*Medical News*) succeeded in causing their absorption by cataphoresis. A 5% solution of lithium iodide was applied upon absorbent cotton with the anode of a twenty-cell galvanic battery. The kathode was applied at a distance. The anode being quite small, only two to three milliamperes could be borne without pain. The applications were made with moderate pressure, from five to fifteen minutes, at first every second day, later twice a week. The improvement was slow at first, but very marked since.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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SATURDAY, JULY 26, 1890.

AN ABORIGINAL METHOD OF PREVENTING CONCEPTION.

Mr. Carl Lumholtz, M.A., Member of the Royal Society of Sciences of Norway, undertook an exploring and collecting expedition to the northern parts of Australia a few years ago (*Brit. Med. Jour.*), and on his return gives the result of his researches into the customs and habits of the Australian aborigines, who are generally accounted the lowest race of savages now in existence. Among other customs these people have a curious surgical procedure, called the mika-operation, which is much resorted to for the purpose of preventing the increase of population. The operation, which is performed with certain religious rites, consists in making an incision into the urethra with a flint knife. In a few tribes the males are operated on in childhood, only about 5% being spared. In other tribes a husband must submit to the operation after becoming the father of one or two children.

It is said that the incision is about an inch long, and is made almost to the scrotum; the wound surface is cauterized with hot stones, and during the process of healing, little pieces of wood are inserted into the orifice to prevent it from closing. This artificial hypospadias is said to have the desired result, and the man has no more children.

The motives which inspire the performance of this operation are as different from those which prevail among the more highly cultivated peoples, as are the methods for bringing about the desired result. The reason as assigned is that the aborigines are very indolent, and the idea of providing sustenance for a number of children is very repulsive to the untutored savage, who takes this way of escaping from the dilemma.

A SUGGESTION IN PULMONARY CONSUMPTION.

A suggestion of some interest, whether it be available or not, is that made by Richard Reuter, in the *Cent. f. die ges. Therap.* He states that he has been working in practical chemistry since 1863, a large part of the time as manager of various large manufactories of metal wares, in which the articles as manufactured were electro-plated, either with gold or silver. Here he noticed that many of the people employed in the electroplating departments were at the beginning delicate and sickly, since the work did not require of them much exertion, but afterward gained rapidly in flesh and felt better in many ways.

He was at first inclined to attribute this change principally to the fact that the work was probably lighter than that to which they were accustomed, but afterward observed that the effects were greater than could be attributed to this cause alone. Persons apparently suffering with heart affections, but especially those having a consumptive appearance, even those with a bloody expectoration, found marked relief after working in these departments a short time; the chest pains and dyspnœa became less, the cough became less frequent, the expectoration grew less in amount and was more easily coughed up, in short, the workmen made rapid progress toward health, they improved in appearance and gained in weight. These favorable results were seen in male and female employees of various ages, in whom the pulmonary affection was so advanced as to be recognized by the laity.

Their condition grew worse, however, as soon as they were put to work in other parts of the building—even of a light character, or left off work entirely, and improved when they returned to their former occupation. The thought now forced itself upon Reuter, and gradually changed into conviction, that these results were not from mere chance, but that they might be due to the hydrocyanic acid which is constantly being set free in these apartments.

In such establishments there are large baths in which hydrocyanic acid is constantly being developed, and its peculiar odor is quite strong where a number of baths are in operation at the same time. Reuter believes that the inhalation of the air saturated with this agent is the active cause of these salutary changes in the condition of the workmen. Even if this substance has been tried in such diseases and found wanting, Reuter believes that it is the administration by inhalation that gives quicker and better results upon the respiratory organs.

He does not share the fear that may be present in the minds of some that a violent poison, as hydrocyanic poison is known to be, introduced into the system in the manner indicated for a considerable length of time, would work injuriously upon the organism. Within the last thirty years he has learned to know, in different establishments, more than a hundred persons engaged in this particular occupation who were not injured by it, without a single exception, and the majority of whom

at the present day enjoy excellent health; none of these individuals, so far as it has been in his power to ascertain, have died while so occupied, with the exception of a few who had reached an advanced age, and of these deaths not one could be attributed to tuberculosis.

Reuter himself was actively employed in such rooms for a number of years the whole day long, and afterward had a workroom immediately adjoining and connecting with them by a door that was always open, but at no time did he ever experience any ill effects.

He adds that if his experience be confirmed by observers in the medical profession, it will be unnecessary to point out the simplicity and above all the inexpensiveness of this plan of treatment, which is on that account open to the very poorest.

The Curetting of Chancroids.

Dr. O. Peterson employs three different methods of treatment to hasten the healing of soft chancre (*Monatsh. f. p. Derm.—Centr. f. Ther.*):

1. Excision. Wherever it is possible, the sore is picked up with a pair of forceps, and pared off together with its margins, by means of scissors. The edges are then approximated with sutures, and union by first intention usually occurs on the third day.

2. Painting with tincture of iodine. This method gives good results in small fresh sores and in old ones whose action has become sluggish; occasionally, however, considerable irritation is set up.

3. Curetting. Peterson warmly recommends this method of treatment, which he has employed for the past $1\frac{1}{2}$ years. By curetting we transform the chancroidal ulceration into a simple, fresh wound, which quickly heals under ordinary applications (iodoform, etc.). The technique is exceedingly simple. The chancroid is washed with a solution of carbolic acid or corrosive sublimate, and then wiped with cotton dipped in ether, after which it is curetted with a sharp spoon, as small as possible, just as it is customary to do in the case of lupus, etc. The pain caused by this procedure may be avoided by injecting cocaine into the tissues.

In a total of 300 cases treated in this manner, the average time for cicatrization was $9^{9}/_{10}$ days.

In addition to this, the author gives a table, from which it may be seen that in the 3,055 cases treated from 1881 to 1888, the number of complicated cases is in a certain proportion to the average number of days of treatment. In 1888, in which year the operation of curetting was systematically employed, the average time required for treatment was much less than in the preceding years, although the number of complicated cases occuring that year was greater than those of the preceding three years taken together.

During the first seven years the average time of treatment in 2,953 cases was 27.5 days; after the introduction of curetting the average time was 20.7 days. In other words the time of treatment was shortened by a week.

The Diagnosis of Rupture of the Bladder.

Dr. W. W. Keen, of Philadelphia, in *Annals of Surgery*, suggests a new means of ascertaining whether or not the bladder is ruptured in cases of traumatism, by injecting filtered air into it. The idea occurred to him recently, while using Senn's gas test on an animal, but he has had no opportunity of using it on the living body. The advantage which filtered air has over hydrogen gas is the ease with which it may be employed and the fact that no time is lost in its preparation.

He would employ the test in accordance with the following directions:

1. Introduce the catheter and empty the bladder of any urine that may be present.

2. Connect the catheter with an ordinary Davidson's syringe. This should have been disinfected. Over the distal end of the syringe a moderately copious mass of absorbent cotton is tied. If the operator prefers, he can connect the distal end by a rubber tube, which has been padded with absorbent cotton, which may itself have been made antiseptic. The cotton in either case acts as a bar to the entrance of germs as in the tubes of bacteriologists. Air is then pumped into the bladder. Should no rupture have occurred, the rounded, elastic, tympanitic bladder will appear in the hypogastrium. Should there be a rupture, the air will escape through the rent into the general peritoneal cavity, and distend the entire belly. It is perhaps even a needless precaution to have the air filtered free from germs in carrying out this procedure, for should the bladder be ruptured, laparotomy, of course, would be done, and the unfiltered air of the room would gain free access to the peritoneal cavity from the abdominal wound. If the bladder is not ruptured, the air pumped in would, of course, escape at once by the catheter, and have done no harm; but I should decidedly prefer to filter the air, and so exclude any possibility of infection.

MEDICAL ITEMS.

A Royal Hypochondriac.—King Humbert, of Italy, is said to receive at least forty prescriptions for dyspepsia every week.

Fissured Nipples can be protected from irritation during the nursing period by painting over the fissure a solution of rubber and chloroform.—*Times and Register.*

A Tough Baby.—It is reported that recently a New York baby fell five stories and landed unhurt, except for a little bump on its forehead and a slight sprain of one of its ankles.

To Foretell the Character of a Labor.—A Dakota physician says: If a woman has gone two hun-

dred and eighty days labor will be easy; if less than two hundred and eighty days labor will be long and tedious in proportion to the days lacking.

Dr. Brieger, whose name is favorably known for his original work in bacteriology and general pathology, has been appointed Extraordinary Professor in the University of Berlin.

To Remove Warts.—According to the *Therapeutic Gazette*, castor oil, constantly applied for two to four or six weeks—that is, once a day—has not failed in any case of any size or long standing.

Foundlings in Egypt.—In Egypt foundlings are placed in the charge of wet-nurses, who are inspected weekly and fined if either child or nurse is not well and in good condition. The plan is said to work well.

Female Physicians in Scotland.—Queen Margaret College, Glasgow, will open a fully-equipped medical school for women next October.

At the University of Aberdeen, the General Council proposes to throw open every class to women, without restriction.

A Reading Room at Berlin.—A reading room is to be established in connection with the Tenth International Congress for the benefit of its members. The current medical literature will thus be at command, and medical men from every section of the world can there review their home journals.

A Royal Oculist.—Duke Charles Theodore, of Bavaria, has just concluded what this hard working prince calls a holiday. During a four weeks' vacation in the Tyrol, the Duke treated all the poor peasants who flocked to him. This royal oculist in this way did fifty-three operations for cataract and one hundred and seventeen minor operations.

The Alvarenga Prize, of the College of Physicians of Philadelphia, consisting of one year's income of the bequest of the late Senor Alvarenga, of Lisbon, has been awarded to Dr. R. W. Philip, of the Victoria Dispensary for Consumption and Diseases of the Chest, Edinburgh, for his essay on Pulmonary Tuberculosis, which will be published by the College.

Deaths of Eminent Foreign Medical Men.—The deaths of the following distinguished members of the medical profession abroad have been announced: Dr. E. Graber, *privat-docent* in Medicine in Munich; Dr. van der Burg, Professor of Pharmacy and Toxicology in the University of Leyden; Dr. Schneider, Professor of Zoology and Director of the Zoological Museum in the University of Breslau.

Hygiene in Germany.—During the past few years the subject of hygiene has received marked attention from the German Government. In nearly all the leading universities there are now hygienic institutes, thoroughly equipped in every way. Recently the new Hygienic Institute in the University of Halle was opened. The Institute has a lecture-room and also special chemical, physical and bacteriological laboratories.

Treatment for Tape Worm.—Campi's treatment for tape worm is as follows: Give over night five or six fluiddrachms of castor oil. Next morning give early two drachms of thymol divided into twelve doses, one to be taken every fifteen minutes. Immediately after the last dose of thymol, give a dose of castor oil, and in a few minutes after taking it the worm will be expelled entire.—*Times and Register.*

Protection of the Insane Against Fire.—In view of the frightful loss of life from the burning of asylums at Montreal, Canada, and Utica, N. Y., the Committee of Charities of the Massachusetts Assembly has framed a bill requiring iron fire-escapes to be constructed on the outside of all asylums for the insane throughout the State. The New York Lunacy Commissioners have also promulgated regarding this subject.

An Interesting Literary Reproduction.—According to the *N. Y. Med. Jour.*, a Newcastle-on-Tyne publishing firm, Messrs. Mawson, Swan and Morgan, announce the fac simile reproduction of an old manuscript volume entitled Y^e Apothecarie; his Booke of Recepts agaynst alle maner of sickenesses; allso howe to bake meates, to make Uskabaughe, to die clothe or woole, and divers usefull thinges besydes. The manuscript dates back about three centuries.

Death from Tight Lacing.—A death from tight lacing is briefly reported in the *Lancet*, for June 14, in the person of an actress of one of the Berlin theaters. This young woman retired to bed as usual one night, after taking part in the performance, apparently in good health, but she was fonnd dead in her bed in the morning. She practiced tight lacing to an extreme degree, and her premature demise was undoubtedly referable to a cardiac syncope brought on by that injurious habit.—*J. A. M. A.*

On the Surgical Treatment of Long Lasting Abdominal Colics.—By Dr. Lauenstein (Hamburg). The writer found upon operating upon a single lady, æt. 63 years, who for one year had suffered from abdominal disturbances with obstinate constipation, the transverse colon near the splenic flexure compressed by an omental band of the breadth of two fingers. The band was ligated in two places with silk ligatures. Recovery followed.—The cause of the formation of this constricting band is unknown.—*Annals of Surg.*

An Aid in Laryngoscopy.—A Vienna correspondent of the *Southern Medical Record* says that Dr. L. P. Preston, of Lynchburg, Va., after many efforts to find the easiest mode of raising the epiglottis for operative purposes, struck upon the happy thought to press upon the middle glosso epiglottic ligament, when to his great gratification the epiglottis reared as though spurred, and a full view of the upper air passage was obtained. This method has met with great favor with Professor Schrotter and his assistants.—*N. W. Lancet.*

Changes at the St. Louis Medical College.—The following gentlemen have recently been elected professors by the faculty of the St. Louis Medical College: Dr. Henry Schwarz, Professor of Gynæcology; Dr. F. A. Glasgow, Professor of Clinical Gynæcology; Dr. E. M. Senseney, Professor of Therapeutics; Dr. Paul Y. Tupper, Professor of Descriptive Anatomy; Dr. H. G. Mudd, Prof. of Osteology and Regional Anatomy; Dr. Frank R. Fry, Prof. of Diseases of the Nervous System. Also Dr. Jno. B. Shapleigh, Clinical Prof. of Otology, and Dr. Jos. Grindon, Clinical Prof. of Dermatology.

Imperforate Hymen as a Cause of Epilepsy.—In a recent issue of the *Lancet*, of London, Dr. Usher Somers reports a case of epilepsy manifestly due to imperforate hyman. A young woman of twenty, who had never menstruated, exhibited a tumor in the lower abdomen, and also suffered repeated attacks of epilepsy. Examination revealed the vulvar orifice obstructed by a fluctuating swelling, which proved to be the hymen occluding the vagina and preventing exit to an enormous amount of menstrual fluid. Excision of hymen caused a speedy disappearance of the tumor, whereupon the attacks of epilepsy permanently succumbed.—*Med. Age.*

When Judges Differ.—It has often been pointed out that though the phrase "doctors differ" is so commonly quoted as a reproach to the medical profession, it is one which, both in its origin and its true application, refers at least as much, if not more, to experts in the law, engineering, and in other so-called exact sciences. The Lord Chancellor (Lord Halsbury), speaking at the Mansion House not long ago, went so far as to make it a particular merit of the judges, and one of their claims to the public esteem which they so justly enjoy, "that they spent nearly half their time in differing from their learned brethren."—*British Med. Jour.*

A New Treatment for Obesity.—A new method of treating obesity is now coming into vogue in France. The method consists in allowing the patient to eat as much as may be desired provided the meal be made of one article of diet alone. Thus a meal may be made of meat, but must be accompanied by no vegetables or farinaceous food—or a meal may be made of bread, but without meat. In this way the consumption of food is restricted through the natural palling of the appetite. A French officer, so corpulent that he had to be lifted into his saddle, was put upon this treatment, with the happy result of fitting him for promotion in a few weeks. Previous to this treatment he was esteemed too fat for any use.—*Phys. and Surg.*

An Eminent Surgeon's Early Struggles.—A gossipy Phidadelphia paper says (which we quote for the encouragement of any blue young reader) that "many years ago, after he had worked in vain for two or three years to get enough medical practice to support him, Dr. D. Hayes Agnew dropped physic in disgust and went to 'keeping store' at Newton, Delaware county. There, in a small shop, he sold tarred rope, sickles, sunbonnets, molasses and rakes, nails and flour and fish nets. But his passion for surgery and medicine made storekeeping galling; he gave it up, risked starvation in a desperate battle with fortune again, and won."—*Boston Med. and Surg. Jour.*

The Dispensary System in Florence, Italy.—Florence, celebrated for her organization of the "Misericordia"—a Society for the gratuitous assistance of families visited by sickness or death—has supplemented that time honored institution by another called "La Guardia Permanente Medico-Chirurgica," says the *Medical Record.* Every Florentine citizen, male or female, whose circumstances do not admit of paid medical consultations, may now, at any hour of the day or night, by calling at or sending to the headquarters of the "Guardia," in the Via Sole, secure immediate assistance for any injury or disease from which he or she may be suffering.

The Origin of Hospitals.—In the *Lancet*, May 31, is an archælogical summary of the most recent discoveries and researches regarding primitive institutions for the care and cure of the sick and wounded. Hospitals existed in India as early as the fifth century, B. C. In Ceylon, according to the English Orientalist, Turnour, King Pandukabhayo established a hospital in his palace, and one of his successors, King Dutthagamini, in the second century before Christ, established eighteen such institutions in as many different localities, with a medical staff for each, and the remedial agents of those days. The Buddhist King, Asoka, as shown by Dr. Buhler, had, about the year 250 B.C. hospitals both for man and animals. There were doubtless many other founders of hospitals whose names are lost, but the *Lancet* thinks that their work was less important than that of the hospitals which developed in Rome and elsewhere as the result of the spread of Christianity.—*Med. News.*

Sweet Springs.

Tickets are now on sale via Missouri Pacific Railway, to this favorite resort at very low rates for the round trip. Ticket offices 102 N. 4th St., and Union Depot.

LITERARY NOTE.

"REGIONAL ANATOMY IN ITS RELATION TO MEDICINE AND SURGERY."—J. B. Lippincott Company announce in press an important work on "Regional Anatomy in its relation to Medicine and Surgery." By George McClellan, M.D., Lecturer on Descriptive and Regional Anatomy at the Pennsylvania School of Anatomy, Professor of Anatomy at the Pennsylvania Academy of the Fine Arts, Member of the Association of American Anatomists, Academy of Natural Science, Academy of Surgery, College of Physicians, etc., of Pennsylvania. With about 100 full-page fac simile illustrations reproduced from photographs taken by the author of his own dissections, expressly designed and prepared for this work, and colored by him after nature. To be complete in two volumes of about 250 pages each. Large quarto.

The object of the work is to convey a practical knowledge of regional anatomy of the entire body. The text to embrace, besides a clear description of the part in systematic order, the most recent and reliable information regarding anatomy in its medical and surgical relations. The illustrations are intended to verify the text and to bring before the reader the parts under consideration in as realistic a manner as possible. Vol. 1 will be ready for publication about December 9, and the second volume is expected to appear shortly thereafter.

The work will be sold by subscription only; salesmen will begin an active canvass the coming October.

SELECTIONS.

FOOD.

By LOUIS BARKAN, in "Health, and How to Preserve It."

[CONTINUED.]

THE ADULTERATION OF FOOD.

The adulteration of food always lessens its nutritive value, although not always deleterious to health. But in some instances actual poisons are introduced by manufacturers and dealers, whose presence renders the article, upon habitual use, gradually destructive of life. The following list enumerates some of the more common and harmful impurities, with simple methods for their detection.

Milk being a universal article of food, its purity is of the utmost importance. It is chiefly falsified by dilution with water, an impurity which may be suspected from the bluish color and the scarcity of fat-globules, but can only be certified by the lactometer or by other scientific tests.

A small quantity of genuine wheat flour will float upon water, while the particles of rice, meal, and other substances used to adulterate it, sink to the bottom. After baking, the presence of those impurities is indicated mainly by the heaviness of the bread.

Butter may be very simply tested for adulterations by spreading a thin layer upon a piece of white paper, rolling the paper into a suitable form, and setting fire to it: if the butter is pure, an agreeable odor will be emitted; but if it is mixed with animal fats, the odor will resemble that of burnt tallow. The presence of other adulterations, such as flour, may be detected by spreading a piece of butter the size of a bean upon a well-folded newspaper: the butter will soon soak into the paper, while foreign substances will be left upon the surface.

Lard is sometimes adulterated with alum, starch, and lime-water. When pure, it is completely soluble in benzine, has no burnt taste or odor, and melts without sputtering to a clear fluid.

Peas, beans, chiccory, rye, and similar kernels, are the chief adulterations used in coffee. They may usually be detected by stirring a handful of the suspected article in cold water, for most of them sink more quickly and color the water less rapidly than the genuine berry.

It should be noted, however, that these impurities are less hurtful than coffee itself. Nevertheless, for the satisfaction of coffee-drinkers, and because it is not to be expected that any large number of these can be persuaded to abandon their favorite beverage, it is well to append certain rules for the detection of coffee-grains compounded artificially from ground peas, cracker-dust and similar ingredients. Genuine coffee-grains are hard and heavy, and sink quite readily in water. Grains which float upon the surface are of inferior quality. Genuine grains do not absorb water, but remain hard and tough. Whether the grains are colored or not, may be determined by putting them into hot water, and shaking them thoroughly; if colored, their dye will dissolve in the water, by whose aid a chemical examination of its character may be made. Coffee injured by sea-water may be distinguished from a disagreeable odor about the beans and by their clinging together. Furthermore, beans which have been injured by sea-water may be detected by shaking them in cold water; if the water acquires a disagreeable taste, the coffee has been in the sea, and should be rejected.

Tea leaves are best distinguished from those of other plants by careful examination after wetting and spreading them out.

Wines are sophisticated chiefly by the addition of alcohol, usually in the form of poor brandy. Champagne, sherry, and other high-priced wines, are not sold in this country without such adulteration. Cochineal and fuchsine, the most harmful coloring matters used, may be detected by evaporating a glass of the wine to one-tenth of its quantity and dipping a piece of white wood into the residue, when the dyes indicated will produce respectively a permanent red or pink color. The coloring matter of a pure wine does not dye wool without a mordant.

Excess of fusel oil in brandy may be ascertained by rubbing a little of the spirit between the palms, and noting whether any odor remains after the alcohol has

evaporated. Good brandy evaporates completely, while the persistence of an unpleasant odor indicates impurities.

Horse-radish is frequently mingled with grated turnip, which, however harmless otherwise, is sure to retard digestion.

The jellies of commence should be avoided. They generally consist of gelatine and apple jelly, colored with poisonous substances and flavored with unwholesome essences to correspond with the labels affixed.

The arsenic, copper, lead, and other mineral poisons often used in the manipulation of confectionery, sugar, mustard, cayenne pepper, pickles, vinegar, tea, beer, and many other articles of everyday consumption, are only to be detected by chemical tests.

In purchasing canned goods it is a safe rule to observe whether the head of the can is concave, a bulging appearance being indicative of decomposition.

Impediments to Nutrition.

When eating or drinking one may accidentally swallow some foreign body. If sharp or pointed or of pretty large size, this may cause trouble at some point in the digestive tract by producing inflammation, obstruction, or actual injury. It is, for instance, a dangerous habit to swallow the stones of cherries, plums, and other fruits. Many cases of death from inflammation and perforation of the vermiform appendix are on record, which owed their origin to the presence of these foreign bodies.

The young and eggs of tape worms, trichinæ, and other parasites are frequently ingested with certain kinds of food, more particularly with raw and insufficiently cooked meat. These may remain in the human body, and they occasionally give rise to fatal diseases.

The abuse of alcoholic liquors, especially the immoderate drinking of whisky that contains much fusel oil, is liable to cause diseases, which will be aggravated by bad or insufficient nutrition and by lack of proper clothing and shelter. The degenerative processes caused in many of the vital organs, and particularly in the liver, by the abuse of alcohol, ultimately lead to incurable diseases and to death.

"With each beat," says Richardson, "the heart expels six ounces of blood. During sleep ten less beats occur in a minute than otherwise. The entire difference in working power during a night of eight hours, therefore, amounts to thirty thousand ounces of blood. If I lie down at night without drinking alcohol, I obtain the rest my heart needs; but if I partake of wine or spirits before retiring, I interfere with that rest, for the effect of the alcohol is to increase the number of heart-beats. Instead of sparing my heart, I have added to its activity by some fifteen thousand more beats. The consequence is, I arise wearied and unfit for the day's work, until I have taken another dram of the strong drink I esteem so highly."

It is, moreover, a fact will known to physicians that hard drinkers have little power of resistance when attacked by disease, and that their illnesses are therefore liable to assume a grave character and to terminate fatally. Drinking people quickly succumb to diseases which under other conditions would have no sinister effect and which but rarely destroy those of temperate habits. The abuse of alcohol even establishes a predisposition to disease, so that hard drinkers are known to fall sick much more easily than others, and very frequently so by a fault of their own. They make no effort to avoid exposure either to infection, to cold and wet, or to other serious dangers, because their intellect is under the ban of the deadly poison; and at the same time their digestive apparatus is so weakened by this pernicious habit that they are much more readily affected by cholera, dysentery, yellow fever, and other infectious diseases.

The fact is well established that fully one-half of those who become insane bring this calamity upon themselves, either wholly or in part, by the use of alcohol. It is asserted furthermore that children begotten in a state of drunkenness are epileptics from their very birth.

Tobacco, whether used for smoking, chewing, or snuffing, acts first upon the digestive and respiratory organs, and finally upon the general nervous system. If a portion of the saliva be swallowed while smoking or chewing, catarrh of the stomach may result, and the inhalation of the smoke may give rise to a similar condition in the throat and bronchial tubes. Tobacco should therefore not be used by persons suffering from affections of the stomach or respiratory organs, especially when troubled by a cough. The salivation occasioned by tobacco-smoking is another effect, which, by the constant spitting it induces, more or less depletes the blood and disturbs digestion.

Smokers should keep their mouths and lips very clean, as well as the pipes and holders of which they make use; for it is a well-known fact that smokers are very apt to suffer from cancer of the lips, throat, and nose. The habit of smoking cigars without a holder is often instrumental in the direct conveyance of contagion, by reason of the habit cigar-makers have of moistening the cigar-cover with their lips to promote adhesion.

People who do not smoke have as a rule a better appetite than those who do, and possibly the loss of appetite so often complained of nowadays is due in part to the increase of this habit. If smoking is indulged in immoderately, it produces considerable nervous irritation, a feeling of oppression in the chest, palpitation of the heart, and trembling of the hands, and there may even appear graver symptoms that threaten the life of the individual. We know of several eminent surgeons who have been obliged to abandon smoking because their hands trembled during operations, the cessation being followed in a few weeks, in most instances, by a return of manual dexterity and steadiness.

Excessive use of tobacco often proves injurious to the sight, which improves only when the habit is abandoned. Cigarettes are especially harmful, since the

paper used in wrapping them is often impregnated with arsenic and other poisonous substances. To counteract the toxic effect of tobacco, vegetable acids and strong black coffee may be administered.

Mankind would be better off, no doubt, if the use of tobacco were wholly discarded. It might not prove a bad idea to prescribe smoking in the schools as a degrading punishment; this would at least have a good effect upon the boys in so far as it would tend to dissipate the foolish notion that smoking makes the man. As has been tersely said by a well-known author, "Boys when smoking imagine they look like men, while men when smoking really look like boys."

Coffee, if strong, or if taken in considerable quantities, is by no means so innocent and innocuous as many would fain believe. It disturbs the digestion of some individuals, even when taken in moderate quantities; and upon nervous people, or those suffering from gout, piles, and congestions of the liver or other abdominal organs it acts as a slow poison. The use of coffee should be controlled by the physician, and children should not be allowed to drink it at all. The drinking of strong coffee is never advisable, and is especially unwise after meals, when it cannot help interfering with digestion.

The same may be said of tea. If partaken of too frequently, it is not at all harmless, but may cause alarming nervous symptoms.

Cocoa is much more healthful as a drink than either coffee or tea, and when prepared with diluted milk it is very easily digested and is of considerable nutritive value. In Spanish speaking countries cocoa is the national beverage.

INFANT FEEDING.

It is impossible to appreciate the problems connected with infant feeding correctly without a preliminary consideration of the digestion of the healthy infant. From experiments which I have recently conducted in the Philadelphia Hospital, I am led to believe that the digestion of the healthy nursing infant is not a hydrochloric acid, peptic digestion, as it is commonly taught and supposed, but that the milk is simply coagulated in the stomach by a ferment similar to that found in the stomach of the calf. By an examination of the stools of diseased babies suffering from intestinal catarrh, I found that, in proportion as the disease was severe and the stools excessively disordered, the proportion of undigested fat increased, while, as convalescence returned and the stools became more normal, the digestion of fat was better performed.

From the standpoint of clinical experience, pediatrists inform me that they are not prescribing pepsin as extensively as formerly, but that pancreatin and sodium bicarbonate have been found agents of decided value in treating dyspepsia in young children. It seems rational to conclude, then, that the stomach of the healthy baby is simply a coagulating bottle, which forms the milk into an exceedingly fine clot. By removing this clot from the stomach at various intervals after nursing, and by examining it under high powers of a microscope, I found that the clot consisted of albuminoids and fatty matter in a state of very fine subdivision. Bacteria were not present, and the clot was in a condition to be readily absorbed by the intestine. I found also that the same condition of affairs existed in the clots from the stomachs of infants fed upon diluted sterilized milk. We conclude that intestinal and pancreatic digestion is of paramount importance to the young child.

Turning now to the natural food of the healthy infant, we find mother's milk to be slightly alkaline in reaction, rich in fat, and considerably so in sugar, with a small percentage of albumin. When we search for a food most closely resembling this, we find that cow's milk differs from woman's milk in containing less fat, less sugar, more albuminoids, and in having a slightly acid reaction. There is, however, no other food so closely resembling mother's milk.

Since the study of bacteriology, we are aware of a source of danger in cow's milk of which we were formerly ignorant. We know that whenever the average daily temperature reaches a point above 67° F., that albuminoid matter in milk, and in the water of ponds and streams, tends to decompose by fermentation. This fermentation, sooner or later, is attended by the presence of bacteria, and milk so fermented introduced into the stomach of the young child becomes a potent source of disease.

Sterilization of milk consists in destroying these germs by the application of a high degree of heat and pressure of steam; it is effected by the use of different forms of apparatus, one of which I show you; it consists of a tin box, having shoulders about two inches above the bottom, upon which rests a perforated tin tray containing the bottles of milk; these bottles are corked by a rubber cork in the center of which is a glass plug; water is put in the box sufficient to reach to the bottom of the tray; the bottles are filled with milk and corked, and the whole is placed upon the fire. As the milk heats, the glass plugs are removed, to allow the steam to escape, otherwise the bottles would break; after five or ten minutes the glass plugs are replaced, the corks are tightly pressed down, and the milk is boiled for twenty minutes or a half hour. It is then put aside on ice to cool in the bottle in which it was sterilized, and when desired to feed the child a rubber nipple soaked in a solution of boric acid is slipped over the bottle, and the cork having been removed, the child is allowed to nurse. An equally good and simpler way is to cork the bottle with a well fitted plug of cotton; this prevents the bacteria from entering, but does not prevent the gas from escaping.

The sterilization of milk is effectual not only in destroying bacteria, but also in neutralizing tyrotoxicon. An instance occurred in the practice of my friend, Dr. Bennett, while at Atlantic City, where, in an institution for the care of infants, milk became poisoned by

tyrotoxicon. None of the children were affected by the poison, as they were fed upon sterilized milk, while most of the mothers who drank the milk without sterilization were violently ill. It is evident that the best food for children will be cow's milk, modified to resemble as closely as possible mother's milk, and then sterilized.

The formula which seems best is one recently proposed by Rotch, of Boston, which is as follows: Milk 1 ounce, cream 1½ ounces, water 5 ounces, milk-sugar 3½ teaspoonfuls. This is to be steamed in the bottle for twenty minutes, the bottle tightly corked with a cotton plug; after steaming remove the bottle. After it is partly cool, add half an ounce of lime water, then keep it on ice.

When a child is three or four months old there are several artificial foods which are very useful when mixed with milk, but for the nourishment of the nursing infant they are far from being the best substitute for mother's milk. In the case of children acutely ill milk should not be given at all, but barley water may be given combined with the white of a raw egg, and with whisky or sherry wine. Free stimulation should be always employed in all acute diseases of infancy, and a child can be perfectly well supported by means of stimulants, barley water, rice, or arrowroot water, or with whisky and simply boiled water for twenty-four, thirty-six, or forty-eight hours, until the practitioner can empty the intestines of irritating matter, and thus give nature time to resume the digestion of milk.

Considerable difficulty is found in introducing sterilized milk for common use, from the fact that ignorant mothers do not understand its value, nor the way of using it. Efforts have been made to induce those who furnish large amounts of milk to keep sterilized milk for sale, but so far these efforts have been very little successful. In Philadelphia the Visiting Nurse Society has been sterilizing milk for poor children for a number of months, and has furnished over thirty gallons of sterilized milk. This is taken to the mothers by a trained nurse, the consumer paying for the cost of the milk, but not paying for sterilization, and in many cases not being able to pay for the services of the nurses. So far as I am aware, this is the first instance of the kind in which this has been done.

Of the value of sterilized milk there is no doubt, and it is safe to say that the infant mortality of the world has been reduced at least one-tenth by this process.

We do not claim that milk as taken from the cow always needs sterilization, but that in many cases, especially in towns and cities, it is an unsafe food for children unless so modified.—E. P. Davis, M.D., *Med. and Surg. Rep.*

CONDUCT OF LABOR.

In my conduct of labor I simplify as much as possible, paying due regard to cleanliness. I have never used antiseptics of any kind, unless it be a few drops of carbolic acid.

When called to a case of labor I make an immediate examination of abdomen with the stethoscope and manual palpitation, and as far as possible by those means determine the position of the child; then I pass to a digital examination per vaginam and make out the presentation and condition of the parts.

If the pains are absent, weak, and ineffectual, I have the woman walk about the room, and at the same time give caulophyllum in hot water in teaspoonful doses every fifteen minutes. I have never had it fail me in establishing good labor pains in a short time. As labor progresses, for rigidity of the os I give 20 drops of gelsemium in a tablespoonful of hot water, and sit the patient over a vessel of steaming hot water. I rarely have to repeat the dose. Cimicifuga acts well sometimes after gelsemium fails.

After complete dilatation of the os I rupture the membranes and assist the woman by a sheet bandage over the abdomen. Giving one end to the nurse we draw it taut during pains. After a reasonable time, say four hours at the longest, if little progress is made, I resort to the short forceps (Hale's pistol handle) when practicable, and deliver under chloroform. I cannot think it right to allow a woman to suffer for hours until exhausted, to deliver a large head which may be relieved in a few minutes by chloroform and the forceps. If the parts are pliant and yielding no harm can possibly occur.

For rigid perineum, he who tries the following will never be without it,—I consider it indispensable and infallible:

℞	Chloroform, - - - -	℥ij.
	Ether sulph., - - - -	℥j.
	Cologne, - - - - -	Oj.

M. Sig. Apply locally.

It acts quickly and well. I have had large heads pass perineums which seemed impossible without extensive rupture, without the beginning of a tear even, when this preparation was used. It was first recommended by Dr. Wm. V. Howland.

I now administer half a teaspoonful of ergot, and after completion of the second stage of labor I wait until pulsation has ceased in the cord, then ligate and cut it, tying both ends. (I think it safer to tie the umbilical end, as I had a case of a child who nearly bled to death through this omission).

The child is now passed to the nurse, who quickly and thoroughly oils it with pure olive oil and rolls it up in a soft flannel blanket (after she assists me through the remaining attentions to the mother, it is then washed and dressed).

In ten or fifteen minutes after the cord is cut, I remove the placenta by gentle, firm, steady pressure, —more of a grip—on the fundus of the womb, while I make traction on the cord with the other hand—right or left, according to my position (I prefer the right side of the patient).

In retained placenta, I introduce the lubricated hand and peel from the uterine side.

In reference to the use of anæsthetics: I use chloroform, allowing the woman to inhale it from a handkerchief herself when the pains are very severe. I am certain it lends courage and strength, for the pains become more expulsive and bearable.

After labor I apply a cloth saturated with hypericum perf. 1–4 over the pudenda, and usually admininister bell. hypericum internally. This quickly relieves all soreness from the parts and als actso in the capacity of an antiseptic. Later on I use vaginal injections of a weak solution of calendula, glycerole, and a few drcps of carbolic acid, a solution which is soothing and healing, as well as grateful to the patient.—F. W. SOUTHWORTH, M.D., in *Jour. of Obs.*

POST-PARTUM HÆMORRHAGE.

Real post-partum hæmorrhage, that is, flooding coming on after the third stage is completed, whether this happens after half an hour, or after two or three days, is a most serious thing, and there is no emergency in midwifery which leaves less time for reflection. In one case, occurring suddenly nearly an hour after the delivery of the placenta, and when I had my overcoat and hat on ready to leave the house, I stopped by passing my hand up into the uterus, and tickling the inner parieties with my fingers; the uterus contracted down on my hand, and the flow ceased. I never saw a woman lose so much blood in a minute or two; it was just such a hæmorrhage as one would see from a severed jugular. I had heard of rivers of blood; I saw one that night.

The value of the Faradic current in these emergencies is undoubted, and I always leave a two-cell battery, in running order, at the side of my desk, so as to send for it if I apprehend any danger of hæmorrhage. I also, during the first stage of labor, secure a nice juicy lemon, so as to have it handy in case extensive bleeding occurs in the third stage or later. Half a lemon carried up into proximity with the bleeding surface, and the juice squeezed out against it, will put an end to the bleeding. Ice is good, but not as good, nor as easy to handle, as a piece of lemon, and adds to the already existing shock. I use ice, and ice-water, to effect the expulsion of a retained placenta, but rarely in hæmorrhage from an empty uterus.

I very much doubt if the ergot treatment of post-partum hæmorrhage is any considerable advance on the brandy and opium of years ago, especially when this was fortified with small doses of capsicum. In fact I have ceased to carry ergot, and do not remember to have used it for three or more years, except as it forms part of the formulary of Hayden's styptic, in which combination it ceases to be ergot in my opinion.

The pulse-rate is a fair index of the safety of the patient. If after delivery it remains above one hundred beats a minute, flooding is imminent.

Even in cases which have been in every particular normal, it is my custom to leave a small vial of Hayden's styptic with the nurse, with directions how to use it if hæmorrhage sets in. Only twice, as far as I now recollect, has this precaution been of service, and the same vial has done duty in many successive cases; but the mental relief that one feels in thus providing for a contingency well repays the small trouble of it.—G. W. WINTERBURN, M.D., in *Jour. of Obs.*

HOARSENESS IN SINGERS.

Dr. Sajous says that amongst the local causes of this affection, perverted lubrication of the larynx, and especially of the bands proper, must be considered. That the laryngeal mucous membrane may be so modified by total or partial absence of lubrication as to induce marked hoarseness, need hardly be questioned.

Similar conditions are found in other portions of the upper respiratory tract. Hoarseness from this cause is more frequent in males, indicating that the use of tobacco is an element in this causation. Traveling in the dust is also a prolific cause. The singing voice is more metallic than usual, greater effort being required when the upper register is attained. The voice improves as the performance progresses, instead of becoming worse, as it would were a true inflammatory process present, especially if the original causes of irritation are strictly avoided. Although apparently of little importance, it deserves consideration, because it may be mistaken for a graver trouble, and astringents used, and in order to be able to advise the patient intelligently in regard to the use of the voice.

Treatment consists in a warm spray every two hours of a saturated solution of potassium chlorate, and ten grains of ammonium muriate, in a glass of water, at the same intervals.

The most frequent among the inflammatory causes of hoarseness are those due to catarrhal changes of a chronic character in neighboring cavities, especially the nose, naso-pharynx, pharynx and tonsils. A coryza or an acute exacerbation of a simple chronic rhinitis, will not cause hoarseness, but will "throw a veil over the voice," as professionals term it.

The troubles of neighboring cavities need appropriate treatment peculiar to each case. Rest of the voice is important, as use during this disorder almost always causes it to lose some of its brilliant qualities. With professional singers, however, this is next to impossible. The next best thing is to abandon rehearsals; limit to the smallest possible degree the parts to be spoken or sung; to transpose all high notes, or, if this is not possible, to shorten the chest register a couple of tones, thus changing to the head tones without having to throw upon the larynx the strain of the two highest tones of the chest register.

The condition of the intestines should be attended to. Enemata of warm water and glycerine will often

act well, and will also improve the voice if, as is often the case with travelling artists, the bowels have not moved for several days. The local treatment of the larynx, when there is a turgid condition of the capillaries of the vocal bands, is a solution of resorcin, 7 grains to the ounce. This is used with an atomizer every two hours the first day, then three times a day. To make it reach all parts of the larynx, the voice should be sounded during the application.

When the hoarseness is extreme, an application of carbolized iodo-tannin or a solution of perchloride of iron, 20 grains to the ounce, with a cotton pledget, causes sudden contraction of the capillaries, which is effectively maintained by the resorcin solution.

When the case is recent, an insufflation of the following powder: morph. acet., gr. $\frac{1}{8}$; bismuth subnit, gr. i: silicate of soda, gr. i; repeat in two or three hours, followed by a fine spray of liquid cosmoline, will sometimes abort it. Coca wine, taken half an hour before the performance, and at the end of each act, will be of great assistance.

Electricity, in the form of a mild Faradic current, the positive pole being applied behind the larynx below the inter-arytenoid notch, and the negative each side of the thyroid cartilage, is aften of service in impaired muscular motility. Internally, a pill composed of one gr. of quinine and $\frac{1}{4}$ gr. of ext. nux. vomica, every two hours, is useful.—*Jour. Am. Med. Assn.*

WHAT IS THE PRESENT MEDICO-LEGAL STATUS OF THE ABDOMINAL SURGEON?

The factors, then, that enter into the inquiry, "What is the medico legal status of the abdominal surgeon?" and that largely determine that status, may be grouped and summarized as follows:

1. The operator's ability. What has been his apprenticeship, what his surgical aptitude—his experience, his fertility of resource, in short, his abdominal instinct?

2. The propriety of the operation. Has this been established beyond reasonable doubt, and have its necessity and dangers been fully explained to the patient and his or her friends; or in case of minors, to guardians or parents?

3. The consent of the patient. Has this been obtained in a legal and binding manner, and have the near friends also consented; and in case of minors have the parents or guardians legally consented, and is there indubitable proof of this?

4. The preparation of the patient. Has this been adequately done in accordance with the modern rules of abdominal surgery?

5. The anæsthetic. What form of this was used, and was the anæsthetizer experienced in the administration of anæsthetics? Were the proper precautions taken to determine the comparative safety of the anæsthetic to the patient?

6. The operation. Has it been performed with that skill that the present light of the science would demand?

7. The after-treatment. Was this in all its details scrupulously and zealously carried out under the eye of the operator? Was a skilled nurse employed who faithfully attended to her duties? Did the attending physician yield absolute control to the operator?

8. The environment. Was the operation done in hospital, public or private, or at the home of the patient?

9. The transportation of the patient. Was the patient removed prior or subsequent to the operation? If so, under what circumstances? Was it with the advice and consent of the surgeon, and under his superintendence?

On a trial for manslaughter resultant from a disastrous abdominal operation, some or all of these questions would form proper subjects for inquiry by the court and therefore appear germane to the purposes of this discussion. Doubtless others will be dealt with by the authors who jointly appear in this debate. I will therefore conclude what I have to say in a few brief sentences bearing on the rights of patients and operators.

A patient has the right to refuse operative treatment, however urgent and imperative the need.

After operation the patient has the right to refuse further attendance or treatment from a physician or surgeon who may have been in charge, either as operator or otherwise.

The patient, if sane, has the right to be removed at any time she may elect. Her action or movements, her acceptance or non-acceptance of a course of treatment by her physician, are matters of her own option over which he can exercise no legal control. She can go counter to or in accord with his advice as she may will. He cannot exercise over her person any authority beyond that to which she consents.

For any act of duress the physician could be held legally liable.

In the matter of the husband, his legal control over the wife would not prevent her from submitting to surgical or other treatment at the hands of a physician of her own choice, but with her consent the husband would have the right to direct or control her movements in the face of any protest of the physician.

The same principles in a modified form apply in cases where there are guardians.

From the foregoing it will we seen that the physician is absolutely helpless in all such cases as he cannot reach and control by moral suasion. This places the abdominal surgeon at a peculiarly trying disadvantage, for he is in the rather anomalous position of incurring great legal responsibility in cases where he has few legal rights or privileges.—Wm. Warren Porter, in *Journal American Medical Association.*

CHICKEN MILK, THE NEW FOOD FOR INFANTS.

The following recipes are from *Good Housekeeping*. They are now being used in all the Canadian hospitals. No. 1 is the more delicate of the two, and can be used in cases where the patient cannot retain even a soft-boiled egg. No. 2 is prepared in a different manner, and is more for cases where the patient is stronger or more nourishment is necessary. Both, as the ingredients demonstrate, are most nutritious. Calves' feet prepared in the same manner as No. 1 are also an excellent substitute for beef tea and form another slight variety in the limited menu of the poor invalid.

Chicken Milk, No. 1.

Cut a chicken into small pieces, and see that it has been cleaned in the most careful manner, removing the skin. Put it into a china-lined sauce-pan, with the bones and neck, the white part of a head of celery, and the stalks (not leaves) of a fresh bunch of parsley, a few pepper-corns and a little salt. Cover the meat with cold water, and let it simmer till it is in rags and falls from the bones. Strain into a flat basin or large bowl. When cold it should be in a stiff, clear jelly. Carefully, with a skimmer, take off the grease, and then take a soft, clean pantry towel, dipped in hot water, and gently wipe over the top of the jelly with it, so that no particle of greasy matter can possibly remain. Take equal quantities of this jelly and fresh milk, put them into a small, china-lined sauce pan, and let them boil together. Boil up the mixture three times and strain in to a cup. A teacupful is generally considered sufficient at a time. The finest strips of dry toast are an agreeable addition. It can be eaten hot, or allowed to cool and form again into jelly, according to taste.

Chicken Milk, No. 2.

Prepare the chicken in the same manner as in recipe No. 1, but instead of using water, cover it with a quart of fresh milk and use a *bain-marie*, or improvise one by putting the chicken and milk into a very large jam-pot, and setting that in a sauce-pan nearly filled with cold water; when the milk in the jam-pot boils, the "Chicken Milk" is ready for use. Cream may in some cases be substituted for milk, and sometimes equal quantities of cream and milk are used.

A word of advice: Do not trust to your cook to follow out these recipes. No ordinary cook can see, or be made to see, why the leaves of the celery and parsley are not to go in; why the jelly should be wiped with a damp cloth; why the milk must be boiled up three times.—*The Doctor.*

ALBUMINURIA.

In a digest of walking cases of albuminuria, by Dr. James F. Goodhart, in the *Medical Press and Circular*, Feb. 12, 1890, the author stated that his observations were derived from an examination of 272 cases of albuminuria which had come under his notice during the last ten years. Dr. Goodhart called special attention to a form of congestive albuminuria in which the patient complains of a certain amount of ill-health, whilst on inquiry it is found that he eats and drinks too much, takes no exercise and probably has gouty antecedents. In such cases the urine is of high specific gravity, and contains only a small amount of albumin. The treatment consists in the periodical administration of a purge, and in making the patient live according to the ordinary laws of health. When these can be followed the albumin soon disappears from the urine. These cases are clearly not due to nephritis, and it is in describing the pathology of such an affection that the term "congestive" is of service. The temporary presence of albumin in the urine can also be sometimes explained by the fact that in females the urine has become mixed with leucorrhœal discharge, whilst in the male the seminal and prostatic secretions may produce a similar result.

Dr. Goodhart also maintained that intermittent albuminuria often occurs in highly neurotic persons, and to prove this point he quoted the details of several cases which had come under his notice. In such instances the occurrence of albuminuria may, perhaps, be explained by assuming that there has been oxaluria or some temporary disturbance of the digestive functions. In other cases where albumin appears in the urine after scarlatina, and is therefore presumably due to nephritis, the patient remains in good health. In such instances Dr. Goodhart thinks that the phenomenon is to be explained by supposing that each organ in most individuals has a margin of working power which can be temporarily encroached upon without bad result. Acute nephritis may run its course without any dropsy, and it is then very likely to be overlooked unless an examination be made of the urine. Dr. Goodhart related two such cases occurring in children who were first cousins to each other; in both instances the skin was remarkably dry and shrivelled. In one of these cases a *post-mortem* examination was obtained, when it was found that the kidneys were small, their capsules adherent, their surface pale and speckled, the cortex much diminished in amount, whilst microscopically the malpighian tufts were seen to be undergoing hyaline degeneration. On the other hand Dr. Goodhart has seen cases of chronic parenchymatous nephritis associated with dropsy lasting for some months, the patients recovering completely even when their cases had appeared almost hopeless. Albuminuria may alternate with the elimination of uric acid, or of sugar of the kidneys. In such cases it seems as if there was a sudden unlocking of abnormal metabolic process, but it is, perhaps, more correct to say that there are oscillations in the pathological processes and formations just as there are in nature, or in the normal body heat. In cases of albuminuria Dr. Goodhart lays down the following as a good rule of practice: "If a case presents itself for examination, and albumin is found in the urine, it is a

case for further examination; if it be in a young person, and the examination be conducted upon the urine of the early morning, the albumin will probably have disappeared at the next axamination or within a very short time, and it is a condition of no importance. If the albumin is in any quantity, and its presence is persistent, or reappearance frequent, it must be regarded, to use Dr. Gairdner's apt expression, as a danger signal to be watched, and, personally, I believe that some of the cases at any rate are due to patches of inflammation irregularly distributed in the kidneys."

Dr. Goodhart believes nitric acid to be the best form of test for albumin occurring in the urine; he has of late years discarded picric acid on account of the frequency with which this reagent causes a difficulty when quinine has been administered. Picric acid, however, undoubtedly makes the greatest show when there is only a trace of albumin.

TREATMENT OF EPILEPSY.

Personally, I am a pessimist. I have never reported cases of epilepsy as cured. I have had a patient, after treatment, go without an attack for eleven years, another one for seven, and yet the epilepsy recurred. I must state that I believe ordinary cases of epilepsy can be cured by long continued use of bromides, but such cases are very rare. The treatment in medical cases must be continued for five years. In the fourth year the dose may be gradually diminished; in the fifth year the dose may be discontinued. Great skill is needed in finding the right dose, for if the dose be too small, there is no effect; if too large, severe bromism is excited. From one to two months are often needed before the proper dose is ascertained, and during this time the patient must be seen frequently. The capacity to resist bromism varied greatly. In some cases 30 grains daily produced it, while in others 150 to 250 grains daily had no effect.

Little children bear much larger proportionate doses than adults, because the drug is much more quickly absorbed; 40 to 60 grains daily may be needed for a child 2 years old.

A single bromide, administered in water, is preferable to any combination. The bromide of soda is comparatively tasteless and less apt to disorder the digestion. Fifteen grains to the drachm of water is a convenient proportion. The bromides should be greatly diluted. Thirty grains require one half tumblerful of water. If arsenic or digitalis are needed they should be given separately.

Just as quinine is given four to six hours before the malarial paroxysm, so the bromide before the epileptic fit. In the nocturnal epilepsy occurring between 12 and 2, the drug should be given early in the evening. If the attack comes on about daylight, the patient should be waked up some hours before and given his dose. If the attacks are irregular, the doses are given three time a day, as a rule, after meals.

When there seems to be a special predisposition to attacks at the menstrual period the dose should be increased for the four or six days of danger.

The dose may be reduced after three years, if the patient continues well. I am accustomed to lessen it by seven and a half grains every three months. During the autumn and winter the dose should be increased; in summer, decreased.

During temporary ill health, *e. g.*, colds, diarrhœa, etc., the dose may be decreased, but never omitted entirely. In very severe illness it may be discontinued.

Can anything be substituted for bromide? I believe that chloral hydrate may be combined with or may be substituted for it. I have had better success, however, with a combination of them. There is a severe confluent form of acne, affecting the legs especially, and producing deep ulcers, which can not be got rid of unless the bromide be discontinued, and then chloral may be substituted. Unusual debility and mental dulness are indications for chloral.—Dr. E. C. Seguin, *Can. Pract.*

THE ABORTIVE TREATMENT OF GONORRHŒA.

Two papers were recently read upon this subject at the Society of Practical Medicine of Paris.

Dr. Malecot discussed the treatment by injections of nitrate of silver. He regards the prejudice against the employment of silver as unreasonable, if the salt is properly applied, but he considers the strong solutions dangerous, especially if used for several days in succession. They may provoke discharge of blood, and their too energetic action may diminish the subsequent elasticity of the canal. Furthermore, with the piston syringe the sphincter may be forced and the caustic be uselessly injected into the bladder. He therefore recommends the olive bulb instillator, which is introduced as far as the muscular sphincter. The additional sensation of resistance here felt serves as an indication that the instrument has gone far enough.

The patient first urinates, then the canal is washed out with a feeble boric acid solution, and the instillation made—the first day in strength of 1 to 50, and the following day 1 to 100, or 1 to 150, the solution being retained in the urethra for two or three minutes. The irritant action is of short duration, and affects only the epithelial layer of the mucous membrane. It is recommened to wash out the urethra with some antiseptic solution in the intervals between the acts of urination, such as the permanganate of potassium, resorcin, or bichloride, the latter not stronger then 1 to 10,000 or 1 to 20,000.

Dr. Malecot has obtained excellent results from the salicylate of mercury in strength of $\frac{3}{4}$ grain to 3 ounces of water, at a temperature of about 100° F. It is a strong antiseptic without being painful. Internal treatment is not wholly neglected, sandal oil, copaiva, etc., being given in the belief that they undergo a change in the economy by means of which they become germici-

dal. He has also followed Dreyfous in the employment of salol in daily doses of 1½ drachm with the same object in view.

Following out this plan, a recent gonorrhœa may often be aborted and without danger. Only violent inflammation of the urethra should cause one to suspend the treatment. In some cases, without known cause, the method fails.

Dr. Picard entered into the question of the efficacy and harmlessness of abortive injections of the nitrate of silver. If we examine into the action of a sufficiently concentrated solution of nitrate of silver we see that it acts upon the mucous membrane of the urethra just as the gonorrhœal virus acts, causing death and desquamation of the superficial epithelium. The difference between their actions, which explains the efficacy of the treatment, is the rapidity with which the silver acts, destroying the epithelium at once, while the virus requires several days to effect the same result. The success of the treatment therefore depends upon the promptness of its application. It should be made when the first symptoms appear—that is to say, before the appearance of pus. In practice it is at the time that the patient feels an itching sensation in the fossa navicularis, and perhaps notices a drop of clear fluid at the meatus, that the treatment must be instituted. A red meatus, with the lips swollen and everted, turgidity of the glans, and great pain, are contra-indications to the employment of the abortive method. If these parts are normal and the pus is not too abundant and thick, the silver may still be used. The solution he recommends is of a strength of 1 to 25 or 30. The pain occasioned is usually moderate. Twenty-four or thirty-six hours after the first injection, if the discharge persists, a second should be used, provided the parts are neither red nor painful.—*Journal of Cutaneous and Genito-Urinary Diseases*, June, 1890.

To prevent the toxic effects of cocaine, Gluck (*Med. Record*) recommends the addition of two drops of phenol to one drachm of distilled water, to be shaken until solution is perfect, and then ten grains of cocaine hydrochlorate be added. He claims that this prevents toxic effect, increases anæsthesia, prevents congestive reaction and decomposition of the solution, and renders the latter aseptic.—*Times and Register.*

Excursion to the North.—The Vandalia and Illinois Central Line has on sale cheap tourist tickets to all the cool northern resorts. Call for descriptive pamphlets, rates and other information at ticket office, 100 North Fourth St., or Union Depot, St. Louis.

A "milk shake"—weaning the baby.

USEFUL FORMULÆ.

Summer Diarrhœa.

Carharrer recommends the discontinuance of milk as a diet, and substitution of liquid peptonoids with cocoa, pure brandy, and beef tea or broths. Water must be allowed freely, given in small quantities, and often. In bad cases he gives:

℞ Acidi salicylic, - - - - gr.ss.
Cretæ precip., - - - - gr.x.
Glycerin, - - - - - ʒij.
Aquæ rosæ, - - - - ℥xiv.

M. Sig.: Fluid ounce every hour for a child one year old.

The following mixtures will prove of benefit in the treatment of intractable cases:

Loomis' Diarrhœa Mixture.—

℞ Tincture of opium, - - - ½ fl.℥.
Tincture of rhubarb, - - - ½ fl.℥.
Compound tinct. of catchu (U.S.P) 1 fl ℥.
Oil of sassafras, - - - 20 ♏.
Compound tinct. of lavender, enough to make, - - - - 4 fl.℥.

M. Sig.: One teaspoonful every four hours for adults.

Squibb's Diarrhœa Mixture.—

℞ Tincture of opium, - - - 1 fl.℥.
Tincture of capsicum, - - - 1 fl.℥.
Spirit of camphor, - - - 1 fl.℥.
Purified chloroform, - - - 180 ♏.
Alcohol, enough to make, - - 5 fl.℥.

M. Sig.: One teaspoonful every five hours for adults.

Thielmann's Diarrhœa Mixture.—

℞ Wine of opium, - - - 1 fl ℥.
Tincture of Valerian, - - 1¼ fl.℥.
Ether, - - - - - ¾ fl.℥.
Oil of peppermint, - - - 60 ♏.
Fluid extract of ipocac, - - 15 ♏.
Alcohol, enough to make, - - 4 fl.℥.

M. Sig.: Thirty drops every three to five hours for adults.

Velpeau's Diarrhœa Mixture.—

℞ Tincture of opium,
Comp. tinc. of catechu (U.S.P.),
Spirit of camphor, each equal parts. —M.
—*Medical Standard.*

Chest Pains.—For the troublesome pains located under the sternum, and elsewhere in the chest, frequently complained of in bronchitis, Dr. M. W. Emerson has found this formula of much value:

℞ Sodæ salicylatis,
Potassii nitratis,
Pulv. ipecac et opii, - - aa gr.ij.
Fiat capsulam.

Sig.: Every three hours.—*Col. and Clin. Record.*

ORIGINAL ARTICLES.

NOTE ON EXTRA-NEURAL NERVOUS DISEASE.

A CLINICAL REVIEW PAPER.[1]

BY C. H. HUGHES, M.D., ST. LOUIS.

Gowers, in one of those masterly pathological differentiations in which he is so characteristically adept, has given a description of a number of neuropathic states, which he has happily characterized as adneural in contra-distinction from inter-neural solutions of continuity in nerve-tissue, either central or peripheral, associated with and giving rise to characteristic and sometimes the classical symptom groupings of nervous diseases.

That there are many diseased manifestations of the nervous system and of portions of its mechanism justly entitled to be termed adneural, or as we prefer to call them, extra-neural nervous diseases, we have ample confirmation in the syphilitic neuroses and neuro-psychoses of exclusively gummatous origin, just as there are diseased conditions of the nervous system obviously due to the effect upon it of the venereal virus, which can in nowise be classed as simply adneural in character; among these latter, the directly neural destructive changes, due especially to syphilitic arterial degenerations, etc., and the specific and post-febrile neuritides, multiple and peripheral neuritides of malaria, alcoholism, rheumatism, etc.

But the intention of this note is not to discuss this interesting subject at length, as to more than refer to it would scarcely be germane to our present hasty purpose.

Our object in the present paper is to ask in the interest of a nicer and sounder differentiation than now prevails in nervous diseases, with a view to a more definite prognosis from certain symptom-groupings that frequently present in the study of clinical neurology, a more pains-taking attempt at determining the pathological causative factors, and the differentiation, wherever practicable, of the probable initial from the final neuropathic lesion in making up our pathological picture of the morbid history of a nervous disease.

Even the swollen degenerative nerve cell in the brain of the chronic alcoholic, and spider cells surrounding arterioles, is not all there is of this toxic disease, nor are the dilatations of the vascular walls all besides in its pathology. The spider cells and nerve centers are supplied with vascular processes. The nervous centers truly bear the chief brunt of alcohol's assault, and a neuropathic heritage of predisposing degenerative decay weakens resistive power in the higher nerve centers to the intrusion of cell-destroying agency of alcohol in the circulation. There is also the cardiac, the renal, the gastric, hepatic and other inherent diathetic weaknesses in hereditary dipsomaniacs that are usually extra-neural, at least in the sense in which strictly nervous disease is commonly regarded.

Vasomotor impressions and arteriole dilatations, often repeated, have preceded, in every instance, the lesions which we recognize of the distinguishing and distinctively pathological condition.

As there are intra-neural pathological changes, so there are also extra-neural morbid changes in the immediately contiguous environment of the nervous system, which as intimately affect the integrity of its structure so far as the purpose of its normal function is concerned, as though that pressure of environment were a destruction of texture. But the final outcome and our justifiable hope of recovery from the patient's history are quite different.

A vascular pressure change, a glioma, or an adventitious lymph deposit along the course of an important nerve or upon a motor, sensory or psychical center may produce a symptom result not materially different, to all appearances, from the irremediable and hopeless degeneration of a sclerosis. The lesion of a vascular pressure change in an embarrassed nerve center may be extra-neural so far as the center showing the injury is concerned; it may be in the medulla, and the lesion, so far as we can see from the symptoms, may be in an area of the forebrain, and an insanity, an aphasia, a mono or polyplegia may follow.

If we accustom ourselves to look habitually at diseases of the nervous system, in these two lights in which they are so often present, we shall some day reach a stage in diagnostic and prognostic evolution, when diagnosis will be less frequently pessimistic than now, even in apparently the most grave disorders of the nervous system. An optimistic factor has even now crept into our prognostications, respecting the outcome, in some cases, of apparent paresis or general paralysis of the insane, more frequently in locomotor ataxia and the sometimes simulated condition of neuritis alcoholica.

There are immediate as well as remote, as there are initial as well as final pathological changes in nerve centers; there are extra-neural as well as intra-neural causes of nervous morbid phenomena for the physician to consider.

The extra-neural morbid nerve change is really much more frequently to be found, if we search for it, with the possibility of a causative lesion existing remote from the part prominently attracting our attention. For instance, in the hyperæmic or anæmic neural conditions of distant nervous organs which are caused by disorder having its origin in the vasomotor centers of the medulla or further above in the brain or in thermal disturbances of distant parts of the neural mechanism due to initiative changes in the heat centers, which are located in this portion of the cerebro-spinal axis or in

[1]This paper was intended for the Missouri State Medical Society, but not read because of absence of author.

the deranged glycogenic function and glycosuria, which present to us so remotely from irritations of the floor of the fourth ventricle, which may be there primarily or secondarily from vasomotor excitation at a point a little removed.

It is especially in the psycho-physical or physio-psychical disturbances which make most of the recognized forms of insanity that this fact stands out most plainly and forcibly.

Insanity is primarily and *ab initio* a psychical and associate vasomotor disturbance of which the grosser cerebral changes, as revealed by cadaveric exploration, are but concomitant and sequent conditions, so far as we have been enabled thus far to learn from the most searching autopsic investigation, aided by the logical discernment which comes to us concomitantly from a simultaneous study of both physiological and pathologico-anatomical conditions, either antecedent to, associated with, or following, the phenomena of normal and abnormal mental functioning. Let us take, for instance, as an illustration, incipient paresis.

There is apparently a stage in this disorder which might justly be called the pre-paretic stage (though some will dispute it), when the pathological conditions are not essentially different to all appearances, and from all that we can discover by analogical reasoning and diligent research, from a state of cerebral arteriole hyperæmia, and consequent cortex excitability, and perverted exaltation of function, similar to alcoholic intoxication.

This is the stage when, in our opinion and clinical experience, recoveries are possible, and do sometimes appear to take place even in general paralysis of the insane, and while the brain is markedly disordered in this insanely exalted function, the chief pathological condition here is, so far as the cortex is concerned, largely in the disorder of the vasomotor mechanism, and in some measure extra-neural with reference to the part specially revealing the disordered function, which is here in the forebrain. (Its initial *locus morbi* may be in the center mechanism of the sympathetic system, or possibly in a small spot in the medulla.) But this is a mixed illustration, for the disorder may not be wholly vasomotor, because the cerebral hyperæmia may be induced by primary cortex irritation, and the brain be overcharged with blood on the principle, "*ubi irritatio ibi fluxus*," as well as from possible excitation in the medulla, as just intimated.

In general paralysis the initial lesion, it is true, is in the nervous system, in the nature of a paralysis vasomotor function and arteriole blood-pressure embarrassment, but its inception is not always in the cortex, but sometimes doubtless in the medulla oblongata. The beginning lesion is not therefore extra-neural, with reference to the whole nervous system, but may be extra-neural with reference to the part responsively affected in morbid symptomatic expression. The nervous system is at fault in these extra-neural affections in so far as in it appears to be the seat of disorder, but the part that shows disorder may be, and often is, acting simply in physiological excess or perversion, because of a distant pathological structural change. In making this statement we are not unmindful of the post mortem revelations of cortex surface structure change in paresis.

Congestive states of nerve centers may be due to either directly or remotely transmitted vasomotor excitation or depression as well as to conditions causing excitation or depression in the vasomotor centers directly.

Neurilemma changes affect nerve function as potently as intra-neural axis cylinder pathological changes, and the resulting disease is one of the nervous system, but it is, in a sense, an extra-neural disease, because not in the conducting nerve texture itself, but embarassing nerve function, all the same by peripheral pressure. The white substance of Schwan is a part of the nerve, but not its functioning part.

Paralytic affections may come, as we know, from external neural pressure, and when they can be traced to this cause the outlook is usually more hopeful than when the cause is solely due to pathological molecular change in the neural cell-groups of the affected center of function. It is thus that we have more hope in post scarlatinal, post diphtherial, and in post-malarial, as well as the post syphilitic paralysis and post-alcoholic, not of long standing, than in paralysis from direct cerebral or spinal violence, and in recent alcoholic neuritides, malarial, syphilitic and neuralgic, if there be not a surgical, unreachable exostosis.

Some of the non-febrile toxic paralyses, too, are for the same reason, hopeful, if we except chronic lead palsy sometimes, and the chronic sequence of very long standing alcoholism. The immediate vasomotor paralysis of acute alcoholic toxhæmia and its motor and psychical paralytic results often recover quite rapidly, as we see in delirium tremens and in the acute limp psycho motor of an ordinary drunk. So too in the extra-neural paralysis of toxhæmic bromism and other forms of non-alcoholic toxic impression.

The distinction to be made between extra-neural and ad-neural nervous affections, is that while *extra-neural* is an affection of the nervous system, chiefly located elsewhere than at the point showing the symptoms of morbid nerve embarassment, *adneural* disease may be at the very point of the symptoms exclusively in the form of an adventitious deposit, a morbific exudate causing, by interstitial or peripheral pressure, all the symptoms. An adneural disease may not be, in strict phrase, a nervous disease at all, while an extra-neural nervous disease is always a disease of a part of the nervous system, distant from the part specially displaying the symptoms, and includes the adneural affections of Gowers.

To return now to the question of mental disease—and the chief purpose of this critical note is to ascertain to what extent insanity, as we generally see it, is primarily an extra-neural disease, so far as the purely intellectual area of the brain is concerned, an involvement of the

gray cortex cells of the hemispherical ganglia and its coverings.

In a paper read before the Cincinnati Medical Society, October 11, 1887, Dr. W. H. DeWitt, on "The Primary Psychoses," shows quite conclusively how psychical disorders of this class are due to functional perversions or "molecular disturbances not the result of coarse changes in the essential nerve element." He even maintains that "the manifestations of excitement in the primary forms of insanity are the cause of the changes in the cerebral cortex, not the morbid alterations the cause of the excitement or maniacal furor," a position we think quite tenable in a large number of cases of insanity if we do not thereby mean to exclude disease from the brain altogether, as the cause of the insanity but admit a remoter morbid neural implication elsewhere than at the precise locality revealing the disorder of function, in other words, as we have stated, *extra neural* with reference to the precise spot showing disorder, that is, with reference to these psychoses from vasomotor disturbances.

The records of the post-mortem table are practically negative as to the precise causative changes for psychical aberration in the cerebral cortex. Often autopsies of acute maniacs dying of intercurrent disease, made by Dr. DeWitt, no single instance, upon careful scrutiny, revealed changes positive enough to account for the mental manifestations. And this is in accord with all other similar research. They were such as are found every day in the post-mortem room of the general hospital.

The microscope reveals but little definitively significant as unvarying cause.

But we ought not to look for absolute and entire causes in post-mortem results, coarse results especially, nor in microscopic sequelæ either, *i. e.*, exclusively, but only relative causes by inference from effects. Post-mortem appearances are consequences and, coupled only with what we know of the physiological activities and perversions of activity leading to their production are these microscopic examinations of special value to the neurological or any other clinician.

When we see a neoplasm or miliary aneurism, a pigmentary, granular or atheromatous alteration, a contracted or dilated arteriole or perivascular space, under cerebroscopic examination, we know that though we have not the cause alone of the disease before us, but partly at least, its results, a certain functional derangement of the neural mechanism essential to the organic life and normal functional co-ordination, has been interfered with, and according to the physiological light we may be able to throw upon the nature of that function, preceding the final change we are studying necroscopically, will be our knowledge of the real cause of the psychical disturbance during life. An island of adventitious deposit may take place, an embolus may lodge in a part from a previous perversion of function, and become itself another source of embarrassed function, through pressure, or by directing entirely the stream of nutrition to other parts than those designed by nature to receive the nutrient supply.

The whole disease is not what we see, even in cerbral gliomata, sarcomata, carcinomata, osteo-sarcomata, angiomata, etc., post-mortem, though it may be a part of it, and often is, undoubtedly; but what our reason, based upon physiological knowledge, coupled with post-mortem resultant appearances, tells us must have pre-existed to have made the necroscopic change a possibility, as well as the secondary degenerative necroscopical demonstrations under the microscopic lens.

It is by the right interpretation of undisputed facts and the proper use of common knowledge in psychiatry, that true progress is promoted. The sure foundation and growth of psychiatry and neurolgic science, as in all departments of scientific research, is in the correct meaning of its facts.

Students of pathological histology are prone to ask the question, "If the microscope fails us what other resource have we?" and to answer, practically, "None!" Here we differ. The microscope does not fail us any more than it does elsewhere in scientific research. It gives us the necroscopic results and the precedent physiological movements are, in part at least, revealed to us by biological science, in which the latter so largely aids us. It gives the facts, and reason must supply us with the interpretation. And now will the reader, carrying with him the distinction which we have endeavored to make between strictly neural and extra-neural or adneural disease, look at the facts? Of the somewhat constant and characteristic appearances, post-mortem, in cases dying of insanity, Dr. DeWitt presents the following *resume* respecting supposed *casus mori* of the so-called terminal psychoses, with a very judicious introductory remark, that very much remains to be added to psycho pathological literature, and quite as much, perhaps, to be expunged, presenting, in confirmation, the fact that a photographic representation of miliary aneurism and atheromatous degeneration of blood-vessels, both purporting to have been taken from the brain of a melancholiac, had been sent him as characteristic of this psychosis of depression, these conditions being, as the doctor correctly states, purely accidental to this disease, having no necessary connection with the mental attitude of the patient, as the gravest forms of melancholia are found without these conditions existing, and miliary aneurism may exist even in a brain healthy enough to display no psychical perversion.

Dr. DeWitt found constant and characteristic brain changes port-mortem in about one-fourth only of the fatal psychoses examined by him. "Even these invariable and direct post-mortem appearances, if we scan them closely, are not what they seem." This is true of all post mortem appearances if we accept them as causes rather than as only partly causes and chiefly results of the morbid action in the disease demanding our attention ante-mortem.

"A very frequent change from the normal condition

is a sclerotic or fibrinous transformation of the vascular walls," an extra-neural condition, you see, so far as the part abnormally affected in function is concerned. "On section, the tissues present a channeled or worm-eaten appearance. The vessels stand out prominently with open mouths beyond the cut surface; in the larger vessels this appearance is readily seen with the unaided eye; passing the finger gently over the surface imparts a sensation of inequality and roughness. Among other changes will be noticed a multiplication of the vascular nuclei, granular or colloid degeneration of the neuroglia. Some investigators claim that the entire vessel may be converted into a colloid granular mass. This is, as you see, an extra-neural.

Continuing the interesting post mortem record, "the most characteristic appearance is the pigmentary and granular transformation of the adventitia." And this is also adneural. These deposits are to be found in groups along the course of the larger vessels, and more especially is this noticeable at or near the forking or bifurcation of a vessel. The very minute branches rarely ever participate in these changes. The continual overstraining of the vessels in insanity induces in time alterations in their caliber. In the normal healthy brain they are found to pursue a uniform, even course, perhaps a trifle undulating or wavy, while in those brains subjected to this strain, we find the vessels tortuous and presenting unequal dilatation and constriction. This is also extra neural.

Now note the next subject and keep in mind the distinction we have made between real intra and extra-neural disease involving the nervous system in disorder. General paralysis of the insane is the next subject, or dementia paralytica. Two cases of paretic dementia with a clear history of syphilis. The growths or deposits were found between the elastic layer of the internal coat and endothelium, consisting of endothial cells multiplying and proliferating, finally being converted into hard, firm tissue. It is, I believe, a well-established fact that these changes may and do take place in the vessel, more especially at the base, independently of any involvement of neighboring tissue; of course, this is the exception, not the rule. In a large proportion of cases this condition gives rises to cerebral inflammation and softening, the result of thrombosis. The external appearance of vessels undergoing this peculiar transformation will be found but little changed, the caliber or lumen simply being encroached upon. These changes induce still other changes in the adventitial spaces.

Cerebral thrombosis is always an extra-neural condition so far as the affected part of the brain is concerned. It is a vascular system, while the subsequent changes are neural.

The other changes refer to the important part played by the perivascular spaces of Robin and His, a very important subject, and very necessary to be understood in the interpretation of cerebral morbid symptomatology. Meynert's conclusions as to the relative frequency of lymph dilatations of these important spaces in melancholia and the acute psychoses may be correct as a fact of observation, but their causative relations are not proven. All this, as you see, is extra-neural or adneural disease—cerebral pressure disease and not cerebral nerve-texture disease. How little of really intra-neural or dissolutive disease of nerve-tissue this is in the psychoses, and these are the chronic and terminal psychoses we are considering.

Connective tissue or neuroglia changes—a subject about which we know less than about some others in cerebral pathology—comes next, and he finds the minute spherical bodies, which some have called nuclei, multiplied.

But the actions of certain hardening solutions on the brain cortex causes contraction or condensation of the fibrils of the neuroglia, and Dr. DeWitt thinks the spider-shaped cells of Meynert are the product of alcohol or chromic acid. At least he regards the question of the pathological rather than post-mortem origin, as *sub-judice* as to them.

We were supposed to have reached the direct pathological changes in the brain changes proper, but as we look at them they disappear in other conditions. Let us look again at the real brain changes—the shrinkages and destructive changes in its substance, its contracted or increased volume, widened sulci, distorted convolutions, dilated ventricles, tortuous and damaged vessels, thickened membranes, and the destructive changes in the cortex cells.

How much and how many of these conditions cause the disease, how much are simply concomitants, and how much does the disease itself cause?

After we have done viewing the coarse changes in terminal dementia terminated, and turned our lens upon the ganglion cells of the cortex, "the first thing to meet the eye is a simple wasting or shrinking of the superficial cells of the cortex. They appear simply diminished in size without any appreciable change in their composition or structure; their associate nerve-fibres are less numerous and very often indistinct in outline. They possess only in a slight degree the quality of absorbing staining fluids. The contrast between these and other cells of normal size and appearance is very striking. The pericellular spaces are seen to be filled with granular and yellow amorphous matter. In the normal brain-tissue there will always be found traces of pigment in the larger ganglionic bodies; in the insane it is greatly in excess, destroying the peculiar fibrillary texture of the cells. There will be observed not alone in the larger pyramidal cells but in the smaller, a colonization or grouping of these granules. The yellow amorphous substance mentioned as being present in the ganglionic spaces, gradually encroaches upon the cell proper, until nothing is left to mark its former location but these abnormal products. This is strikingly suggestive of a gradual deterioration of cell protoplasm." All the cells of the cortex do not participate in these changes, but groups of healthy cells in the

immediate neighborhood of a mass of diseased ones are often seen, as all authors have observed and these changes are not all uniform. The locality and extent of these changes will depend altogether upon the locality and extent of vascular deterioration, the latter being the essential causation element (adneural again). Still another condition to be mentioned in this connection is the swollen, cloudy appearance of certain cells, notably of the parietal region. This is characteristic of the very acute violent insanities, and whether this is extra-neural or not, remains to be settled.

There are also certain well-defined changes to be noted in the white or medullary matter, anfractuosities, changes in color from the normal, certain areas presenting a dark brown color, others again very white or bleached, decrease of the medullary substance between the axis-cylinder and neurilemma. A very infrequent appearance in the ordinary forms of mania is that of cystic degeneration. The author has observed it in but one single instance, no more entitled to a distinctive pathology than the case of melancholia with atheroma. It is far more frequent in paretic dementia, as he claims.

Now we come again to the undoubtedly extra-neural, and how often do we tread extra-neural or foreign ground in our post-mortems?

If we go from the substance to the surface of the brain and scan the meningeal affections that disturb and embarrass normal movement in the mass beneath, we find them all extra-neural. The opacities of the arachnoid, the granular changes and adneural depositions of the dura, the adhesions between it and the bony case above or the subjacent membranes beneath. These and the agglutinations of the tri-membranous covering of the brain and the neo-membranes, which are sometimes seen beneath the dura and all the vascular, specific, tubercular and inflammatory exudations and hæmorrhagic changes which make so much of the pathology of this region, as we see it post-mortem with eye or lens, are all, in a certain sense, extra-neural as well as the opposite bloodless states, associated leukemia, anæmia, scrofulosis and phthisis.

Thus we see how much disease of the nervous system may proceed from causes extra-neural or adneural as distinguished from intra-neural, and how difficult it is to determine how much or how little of the post-mortem appearance is the cause, or distinguished from the sequence of the morbid action, how much is indirect and how well we are justified in taking a binocular view and of employing the direct and indirect designations of intra-neural and extra-neural nervous disease. While a book might be written on this subject, a hint to the wise is sufficient.

The clinician and the micro-necroscopist play each his respective parts. The one searches the sequences of the morbid cause, often finding cause and sequence blended, and with the aid of clinicial experience, the light of physiology and normal histology, looking back from the silent cadaver to the vivisectional revelations or the biological laboratory; the other illumined in his conclusions by the added light of a broad therapeutical experience, revealing function through medicinal and toxic touch of certain nerve centers and cautious, unbiased judgments, they paint the lights and shadows, the background and foreground to the pathological picture, and are thus not misled in their pathological studies beyond the just warrant of biological laws. The scalpel, the electrode, the bacillus, the known or unknown virus of a fever, ptomaines, leucomaines and the chemical atom have a place in their judgment of the antecedent causes leading to the dissolution and destruction revealed under the microscope post-mortem. The morbid or even physiological antecedent processes as well as the morbid finale, the processes that may have led to, as well as proceeded from, the pathological finding, engage their serious thought, and out of the labyrinthian maze of patho-physiology and pure necroscopic debris, they endeavor to get a gleam of the true light. Yet, how imperfect is pathology, and how misleading still, the microscope, if we permit ourselves to study pathic findings without the added light of physiology and clinical observation.

PYOCTANIN IN GONORRHŒA.

BY AL. J. KANNE, M.D., ST. LOUIS.

July 8, 1890, a healthy youth, æt. 19 years, had a suspicious sexual intercourse. On July 12 he experienced a tingling, burning sensation on urinating. Examining his penis, he found the meatus red and puffy, and by squeezing the meatus, succeeded in bringing out some mucoid discharge.

July 13, patient came to me for the first time and recited the above history. He also assured me positively that this was his first experience with any venereal disease.

I examined the penis and found the meatus urinarius red, puffy and agglutinated. By squeezing the glans penis some muco-purulent discharge was made to exude. By examining the discharge microscopically I found it to contain gonococci.

I now diagnosed the case as one of acute gonorrhœa, or clap.

Having of late read much concerning the power of pyoctanin to check suppuration, I argued that it ought to be a capital remedy in gonorrhœa.

Being unable to purchase the drug in the city, I ordered H. Heil & Co. to procure some of it direct from Merck's agency.

In the meanwhile I prescribed for my patient 11 grains of salol every 3 hours. I also gave him strict dietetic and hygienic instructions. Among other things, I told him to drink as little as possible. For the custom of prescribing diuretics and demulcent drinks in acute gonorrhœa probably does more harm than good. An inflamed urethra, like anything else that is inflamed,

needs rest. Each act of micturition disturbs this rest by distending the urethra. It is this distension of the membrane which causes the pain. Diuretics and demulcent drinks increase the number of urinations, and therefore materially interfere with the rest of the inflamed urethra, and delay its getting well. On the other hand, limiting the ingestion of fluids lessens the number of urinations, and therefore gives as much rest as possible to the inflamed urethra, thus putting it under the most favorable conditions for getting well.

July 17, I saw patient again. He told me he had had great pain during the night; this, no doubt, was from chordee. As patient insisted on my prescribing something more, I told him to take one santal midy capsule every 2 hours in addition to the salol.

July 20, saw patient again. His condition was unchanged. He still complains of chordee. The pyoktanin having now arrived, I administered the first injection to the patient, using about one drachm of a 1 in 1,000 solution. After injecting the fluid into the urethra, I closed the meatus with my thumb and forefinger, and kept the solution in the urethra for 15 min utes, thus giving it a chance to permeate deeply the inflamed tissues. I also continued the internal adminis tration of salol and santal-midy.

The next day the patient came to me again, stating that the discharge had diminished one-half, but that the chordee still continued. I again injected pyoctanin in the same manner as before. Next day I saw patient again, and saw the amount of discharge that had accumulated during the preceding 12 hours. It did not exceed two drops. I now gave the third pyoctanin injection.

Two days now elapsed before I again saw the patient. He now came to me to get treatment for malarial fever. I asked him about his gonorrhœa. He said he was uncertain whether he had any discharge on the day following the last injection, but that he was positive that to-day (July 24) he had not had a bit of discharge. I examined the penis, and manipulation failed to bring any pus or mucus out of the meatus. The patient was therefore pronounced cured 4 days after the first pyoctanin injection, and 14 days after the beginning of the disease.

N. B.—Pyoctanin, I may add, is the proprietary name for methyl violet, freed from arsenic and phenol to which are due the poisonous and irritating properties of ordinary aniline colors.

"A Second Sarah."—A woman living in the mountains near Fort Smith, Ark., named Sarah Gates, æt. 71 years, proved herself almost a second Sarah by giving birth to a well-formed and healthy male child. Two years ago, Mrs. Gates, then a widow, married William Gates, a young hired hand on her farm. The case is exciting a good deal of interest among physicians.—*Med. World.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., Editor. W. C. MARDORF, M.D., Associate Editor.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

Communications relating to subscriptions and advertisements should be addressed to J. H. Chambers, 914 Locust Street.

Original Articles, Reports of Cases, Correspondence, etc., relating to interesting medical topics, are cordially invited.

Twenty-five extra copies will be furnished free to the author of each original article.

Illustrations will be furnished free when drawings accompany the contribution.

Contributors desiring reprints can obtain them on favorable terms by applying to the publisher immediately after their articles have been accepted for publication.

Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, AUGUST 2, 1890.

PUBLISHER'S CARD.

It affords us pleasure to know that the profession appreciates the enlargement of the Review, which now compares with the literary work and size of Eastern journals, which cost the subscriber nearly double what we charge for the Review.

The subscription price remains the same, $3.50 a year.

It is but a very few years since the first Weekly Medical Journal was published in the West. It is with great pleasure and gratitude that we are able to say, that we appreciate the generous support of the profession. Our circulation is very large now, still we are desirous of increasing it; therefore we mail of this issue many extra copies to non-subscribers with the hope that those who receive this number will recognize the fact that we are endeavoring to present medical literature at such a price as will enable them to add the Review to their list of journals for the present year.

Who would not have his medical news *weekly*, when it costs him but very little more than to wait for it in monthly journals?

We solicit your contributions and subscription (see prospectus on advertising page ix).

We offer no premiums. We prefer to give full value received in the quality of matter for the price charged, although to all new subscribers we will furnish the remaining issues of this year, after the date of subscription, *free.*

The Physiological and Therapeutical Value of Iron.

The significance of iron in the animal economy depends almost entirely upon its presence in hæmoglobin, of which it is a necessary element. Experimental and clinical proof, however, is lacking to show that preparations of iron uncombined with organic matter can serve as material for the manufacture of hæmoglobin. Moreover, the supposition has been generally accepted that iron introduced in such a form is again eliminated without being used, even though it passes through the circulation, and that it is only those organic combinations of iron occurring in the food that can be assimilated and replace the constant waste which the organism undergoes. On the other hand, it is true that by the use of the iron preparations, various kinds of anæmia, and especially chlorosis, can be cured or improved in which there is not only the want of red blood corpuscles but also of hæmoglobin. In order to clear up these facts the author proceeded to experiment on full-grown and healthy chickens, since in birds the circulation, respiration and heat production are more active and on that account tissue changes more rapid, and because their red blood corpuscles are better adapted to accurate and complete examinations than those of mammalia. Later on he intends to experiment on dogs, rabbits, etc. From the results of his experiments on chickens, which he describes at length, the author derives the following conclusions:

1. The lowered amount of hæmoglobin and the histological changes of the blood depend not upon the condition of the food, but simply on the want of iron, since with this one cannot only avoid but also improve such conditions.

2. Iron given in a form uncombined with organic material is taken up and assimilated by the animal organism. This view is justified not only by the increase of hæmoglobin, but also by the fact that the iron thus administered is used up in proportion to the amount previously withdrawn, and that this ceases as soon as the organism has again obtained its full amount of iron.—Prof. Francesco Cappola, in "*Lo Sperimentale.*"—*Deutsch. med. Zeit.*

MEDICAL ITEMS.

Pilocarpin is recommended by Dr. Hochzeit in chronic rheumatism.

Dr. C. Koehler, the Director of the German Imperial Health Office at Berlin, has had the Order of Merit of St. Michael (second class) conferred on him.

Professor Jolly, of Strassburg, has been appointed to the chair of Mental and Nervous Diseases in the University of Berlin which has been vacant since the death of Professor Westphal.

Cures for Neuralgia of the Head.—An English physician has recently asserted that headaches and neuralgia could be stopped by blowing a solution of salt up the nose. A Swiss physician, Dr. Nægely, asserts that he can cure neuralgia of the trigeminus by pressing up the hyoid bone.

Small Infants.—Dr. Cordes, of Geneva, writes to the *Lancet* that a case of twins occurred in 1858 among his own relatives, one of which weighed only six hundred and twenty-five grammes (25 oz.) the other weighing just twice as much. No couveuse was employed, but both are now living.

Nitrate of Potash in Chronic Malaria.—Dr. J. D. Hunter and other Texas physicians recommend highly nitrate of potassium in chronic malaria (*Daniel's Texas Medical Journal*). In combination with iron and quinine, nitrate of potash has long been used by Southern physicians for this purpose.

French Medical Legislation.—According to the terms of a bill now under consideration in the French Chambers, and likely to become a law, no foreign medcal man will be allowed to practice in France unless he has received the degree of Doctor of Medicine from a French faculty after passing the required examinations.

Medical Study in London.—Medical students in London have been compelled to go through a course of four years' study, hospital attendance and lectures before being qualified to appear for the final examination. By an order of the General Medical Council of England, issued last month, the term of preparation has been extended to five years.

A License Revoked.—The State Board of Health last week revoked the license of Dr. Soper to practice medicine in this State. Dr. Soper was the leading spirit of the Governmental staff of English physicians who did a brisk business at 1601 Olive street, but who left while their practice was in full sway without giving notice to anyone of their intention. Recently Dr. Soper announced that he would return early next month.

A New Method of Examining the Liver, more especially its lower border, is proposed by Glenard. The patient lies on his back, while the physician, sitting to his right on the edge of the bed, passes the four fingers of his left hand under the right hypochondrium of the patient, so as to press out the lumbar region, while the thumb, applied more anteriorly, makes gliding motions from below upward. If the patient now makes deep inspirations, the thumb will distinctly feel the lower margin of the liver.

Medicine a Philanthropic Profession.—A Belgian physician recently brought suit against a former pa-

tient to recover 24 francs as fees for eight visits. The justice reduced the claim by one-third, giving as a reason that "medicine is a philanthropic profession." To be consistent, this choice specimen of legal justice should now treat other "philanthropic" professions and trades in the same manner. It is sometimes laughably absurd to notice the masterpieces of reasoning with which would-be Salons fortify their decisions, especially when directed against the medical profession.

Suicide by Means of a Pin.—At a recent meeting of a Parisian medical society, Dr. Magnan related the case of a young woman suffering from melancholia, who was determined upon self destruction, and to this end stuck a pin of ordinary size into her chest just below the left breast. The pin passed through the sixth intercostal space, into the pericardium, and lacerated the myocardium. Death supervened from syncope, the heart stopping from a quantity of blood filling the lower part of the pericardium, although no important vessel was wounded.

An Opening for Dentists.—An American missionary from India says that there is a chance in Madras and Bombay for a number of bright, skilled American dentists. Madras is a city of three hundred thousand population, and has not a single American dentist. People sometimes travel from there to Bombay, nearly one thousand miles, in order to have a tooth filled. There is only one good dentist in Bombay, and he refuses to fill teeth with gold, using a sort of cement that is not lasting. He charges seven dollars and fifty cents for pulling a tooth.

Syphilis in Russia.—According to *Meditzinskaia Beseda* (June 10, 1890, p. 295), the Russian Medical Department has just elaborated the following measures for combating syphilis, which is rife throughout the Empire: 1. Each *zemstvo* (local authority) must appoint in each *uiezd* (district; the total number of *uiezds* in Russia amounts to 792) a special medical practitioner, who shall devote his whole time and attention to the treatment of syphilis alone, and see that the sanitary measures having for their object the limitation and prevention of the disease are duly carried out. 2. Special traveling dispensaries shall be established so as to secure a regular medical aid to sufferers from syphilis. 3. In each *zemstvo* a special fund is to be established to furnish assistance to families whose father or mother, or both, are admitted to hospital on account of syphilis. —*Brit. Med. Journal.*

Salycilate of Soda in Gallstones.—According to Prof. Stiller, of Buda Pesth, salicylate of soda in eight grain doses four times daily is an excellent cholagogue in colic from gallstones. The pain is said to disappear rapidly, when rigid dieting is enforced, together with the ingestion of large quantities of water. The same drug has also proven itself of great value in pleurisy with serous effusion. The fever is reduced, and the effusion is rapidly absorbed. This effect is so marked that Stiller believes the drug should be regarded as a valuable aid in differential diagnosis, in determining whether the effusion is serous or purulent, since its absorbefacient action is noticed only in serous exudates. In such cases the dosage is 3 to 4 grams (45 to 60 grains) daily, and the diuretic action soon makes itself manifest. Sodium salicylate has also served an excellent purpose in sciatica, and in peripheral paralysis of the facial nerve, when recent.—*Therap. Monatsh.*

Hereditary Tufts of White Hair.—As a pendant to the cases of hereditary white tufts of hair mentioned in another column by Mr. J. H. Morgan, attention may be drawn to a remarkable example of a similar peculiarity which was published last year by M. E. Pascal in the *Univers. Illustre.* In an old Limousin family with which that gentleman is acquainted, nearly all the members, both male and female, have from their earliest youth a tuft of perfectly white hair, such as adorns the head of a well-known London artist. This tuft is generally situated over the brow, but sometimes it is on the temple, and more rarely at the back of the head. The family has been famous for this distinctive mark in its own part of the country for 300 years, and they are said to be as proud of it as Redgauntlet was of the hereditary horseshoe vein on his forehead. The white lock, which can be seen in the family portraits for many generations back, is said to be rather becoming, even to the young women of the line.—*Brit. Med. Journal.*

Stone in the Ureter in Women.—Dr. Berg, of Stockholm, recently had under his care a woman, who, fifteen years previously, subjected herself to a rigorous course of banting treatment, says the *Brit. Med. Jour.* The results seem to have been satisfactory as to their immediate object, but the treatment was followed by symptoms of renal calculus. Shortly before the patient passed spontaneously about twenty small calculi. Temporary relief followed, then very severe dysuria set in. By the aid of the sound, stone in the bladder was detected. The urethra was dilated; the finger introduced, and it was found that a calculus lay impacted in the right ureter, the point projecting into the bladder. As the stone could not be grasped by forceps the bladder was opened from the vagina and the stone extracted, not without great difficulty, by means of a small spoon. The wound was united by sutures and healed readily. Dr. Berg, whose case is mentioned in the *Centralblatt fur Gynakologie*, June 28, 1890, objected to performing supra-pubic lithotomy in female subjects.

Medical Congress in Japan.—It was inevitable that the Japanese who have shown so remarkable a power of assimilating the details of Western civilization should before long hold a Medical Congress. Accordingly, the first gathering of the kind in Japan was held at Tokyo, from April 1 to 6. In spite of the somewhat inauspi-

cious day chosen for the opening, the meeting was a great success, though only two foreign doctors were present; as there are nearly forty non-Japanese practitioners at Tokyo and Yokohama, some disappointment was felt that more of them did not grace the assembly with their presence. It is hinted, however, that the invitation committee was chiefly responsible for the absence of the foreign element. The proceedings were of the usual kind: addresses on various more or less interesting subjects being delivered, cases and inventions, new and old, exhibited, etc. Complaint is made in some quarters that the scientific communications were not sufficiently inspired by the *genius loci*, little or nothing of special interest to the Japanese people being contained in them. As compared with other congresses, festivities seem to have been few and far between, though we are told that on the last day there was a "general social gathering in Shiba Park, at which there was an ample provision for refreshment,"—*Brit. Med. Jour.*

Abstract of Proceedings of the July Meeting of the State Board of Health.

The State Board of Health convened in semi-annual session at the Capital in Jefferson City, on Friday, July 25.

The meeting was called to order at 2:30 P.M., the members present being Drs. G. A. Goben, J. D. Griffith, W. G. Hall, Geo. Homan, and Albert Merrell.

Mr. James B. Prather was absent, and the vacancy caused by the death of Major Gentry has not yet been filled.

Dr. Hall is the newly appointed homœopathic member, and sat with the Board for the first time.

The vice-president, Dr. Merrell, presided, the minutes of the January meeting were read, two applicants were admitted to a written examination for license to practice, and the following report of the secretary was read:

To the Hon. State Board of Health:

Gentlemen:—As no meeting of the Board has been held since January, this report, therefore, will cover the period of the first six months of the current year.

Since that meeting every member who knew him has experienced the feeling of personal loss, and the Board has been deprived of its official head, through the sudden lamented death, on May 22, of our honored president, Major Wm. Gentry.

Doubtless your honorable body will, by appropriate action, duly recognize the loss the Board has sustained in his death, pay a fitting testimonial to his character as a man and as an official, and render a suitable tribute of affectionate regard to his memory.

Public Health.—With the exception of the nearly universal prevalence of the so-called la grippe during the early winter, no epidemic of consequence visiting or arising within the State has been reported to this office; and, excepting the sickness and death, directly or secondarily due to that cause, the condition of public health in the State, so far as the extremely imperfect means of reaching such knowledge enables me to say, appears to have been about normal.

The recent period of oppressive heat, the injurious effects of which on public health were, to some extent due to the accompanying high degree of atmospheric humidity, told severely on the health of the infant and childhood elements of town and city populations.

The high mortality among the young may, no doubt, be properly ascribed in connection with the weakening effect of heat to incipient decomposition induced in common articles of food, cow's milk being most susceptible to injurious changes under such circumstances, with the frequent formation of poisonous compounds that are not always appreciable to the senses of sight and taste, and which act with virulent energy when taken in sufficient quantity into the human system, producing the symptoms known as cholera infantum, cholera morbus, etc.

Owing to the asserted short supply of, and great demand for, ice this summer, which has undoubtedly led to a large quantity of ice, taken from most questionable and dangerous sources, being offered and sold for domestic use, it is reasonable to anticipate a considerable prevalence of enteric disorders during the summer and early fall seasons, caused by the use of ice taken from sloughs, ponds or other receptacles of soil or surface impurities.

Occasional cases of small-pox, or circumscribed outbreaks of that disease, have been reported at intervals in different parts of the country, principally on or near the Atlantic seaboard, and usually due to importation either by an infected person, or by rags, wearing apparel, etc. No recent cases are known to have occurred in this State.

A few cases of yellow fever have within a month or two been reported as reaching some of the seaports of this country, having come from tropical or sub-tropical localities. What the seasonal and meteorological conditions of the next few months will be cannot, of course, be foretold, and no forecast made as to the probabilities of its establishing itself in this country the present summer. The conditions favorable to its entrance and spread in the South are yearly lessening through more perfect sanitary organization, better quarantine equipments and knowledge, and more thorough preventive measures in cities and towns, which will, in time, if persevered in, make the Gulf States proof against its epidemic ravages.

The appearance of Asiatic cholera in Spain about the middle of May and the tendency shown to spread in different directions, is not without great interest to the western continents, and should be regarded by the people of this country as a warning to establish their sanitary defences and maintain them in the best possible condition against its possible advent.

It was the general expectation among public health

officials that this disease would break out afresh in Asia Minor, renewing its destruction of last year, and continue its westward way through Russian or Turkish territory into Europe, and this may yet come to pass.

The quarantine stations along the Atlantic coast, both of Canada and the United States, are believed to be in more ready and effective shape than ever before, and with proper notification of the coming of infected ships, and the exercise of unceasing vigilance, they may prevent its entrance by the seaboard route.

At present the danger would seem to be greatest of its entering this country via Mexico, or by smugglers carrying infected persons or things from the West Indies, landing on points on the Gulf coast.

For information in regard to the general work of official public health bodies, and the practical matters engaging their attention and activity, I would respectfully refer to the report appended hereto on the annual meeting of the National Conference of the State Board of Health, which was held in Nashville last May.

Medical Practice and Registration.—During the first six months of this year 279 certificates were issued to physicians, and 10 to midwives, all being graduates or licentiates of institutions recognized as in good standing under the law and existing requirements. Five duplicate certificates were given on receipt of satisfactory proof of loss of the originals. The number of counties represented by the total certificates of all kinds issued was seventy-eight.

A considerable number of applications were declined for the causes authorizing such action, and a number are pending awaiting final disposition.

In accordance with action taken by the Board at the last meeting the schools of midwifery in the State were notified last January that thenceforth attendance upon two full terms of study of specified length would be necessary to entitle their graduates to registration. Not withstanding this notice, at the close of the spring terms the graduates of two schools in St. Louis presented their diplomas for registration, they having been awarded after attendance on but one term. An explanation was requested of the school authorities and they stated that it was their understanding that the requirement would not apply until next fall. In the face of the written notice delivered to them, which clearly specified the time when the regulation would take effect, the explanation offered was deemed unsatisfactory, and action regarding registration of the diplomas presented declined other than to refer the matter to the Board for decision.

The question which has been pending with the Board for some time of taking action looking to the amendment and extension of the requirements in regard to what shall constitute a medical college in good standing, and to secure regulations in this respect in substantial uniformity with those of neighboring states, is again respectfully called to your attention; and in this connection I would refer to the several reports appended hereto reciting the action taken in regard to medical education by the different medical bodies whose meetings last May I attended as your representative.

The proposition pending, that medical colleges shall be required to exact of their students attendance on three terms of not less than six months each in different years of time, is opposed by only a portion of the schools of this State, and of the United States; while on the other hand, a considerable number of colleges, and which number is constantly increasing, heartily favor the requirement, either having it already in force, or intending its adoption from and after the next session.

The plea is put forth by the protesting schools that if this requirement is added it will prove detrimental to their business interest, and therefore protection for this interest is sought through present inaction of the Board in the matter.

In reaching a conclusion as to what our duty as a Board in a given case may be, we are bound to consider and act in the interest of the public first, for whose benefit and protection the Board was created and established; next, the interest of the entire medical profession of the State; and, last, the interest of the medical colleges.

It can hardly be denied that both the public and the profession would be gainers by the Board taking action as indicated; the former in the better quality of professional services rendered, the latter by the more thorough preparation for practice a more extended term of study would secure, to say nothing of the lessened pressure into the profession such a measure would help to bring about.

For the reasons stated, and because the objection comes from a narrow interest, whose real prosperity as educational institutions is, I believe, endangered by the antagonism shown, and being of the opinion that the good of the many lies that way, I would respectfully recommend action by the Board so that from and after the next term no school shall be recognized which does not require and in good faith enforce attendance by its students on three terms of lectures of not less than six months each, with allied requirements, as indispensable conditions of graduation, and as the only basis on which its diplomas will be recognized by the Board.

Your notice has already been called to correspondence had last spring in regard to the recognition by the State Board of Pharmacy of holders of medical diplomas as lawfully qualified practitioners without presentation of the certificates of this Board, which are the necessary evidence of their legal standing as physicians. The opinion of the Attorney-General on the point in question, given in response to a request from the Governor, is furnished herewith.

The work of printing and publishing the Board report for 1888, under the supervision of the Secretary of State, was completed in May, and a considerable number of copies have been distributed. The general appropriation made for printing public documents being now exhausted, the report for 1889 cannot be issued in

that way, and it becomes necessary for the Board to decide whether the publication of the report shall be attempted out of the scanty funds remaining at our disposal. It is a matter of some importance that it shall be issued as soon as possible, and the question is presented for your consideration and action.

A number of cases arising under the Medical Practice law await a hearing and determination by the Board; some of them date from the last meeting and involve charges of unprofessional or dishonorable conduct on the part of holders of certificates of the Board, or on the part of applicants for registration. A considerable number of applications for examinations for license have been received and are presented herewith.

All of which is respectfully submitted.

GEO. HOMAN, Secretary.

Drs. Homan and Griffith were appointed a committee to draft a suitable memorial to the late President.

The committee reported as follows, the memorial being unanimously adopted and a copy being directed sent to the family of deceased:

MEMORIAL.

"We meet in sorrowful solemnity. Since last we were together we have lost by death one who was the honored head of this Board, the valued friend of every member, and the supporter of every public interest it was the duty of this body to advance and uphold.

In the sudden taking off of him who filled uninterruptedly through years of adversity the office of President of the Board ever since he became a member, we feel that the Board has suffered a loss that will be difficult to replace, as we recognized in him the wise counselor, the conscientious official, the upright citizen of unblemished character, the candid, genial, honest man.

To the end that his name may be perpetuated, his virtues emulated, and as a tribute to his high character, his surviving colleagues do hereby dedicate and inscribe to his enduring memory a memorial page on the records of this Board."

The rest of the afternoon session was consumed in hearing and disposing of a number of cases under the Medical Practice law, the certificate of Augustus Soper, of St. Louis, being revoked on charges preferred for unprofessional or dishonorable conduct.

The recommendation of the Secretary relative to medical schools was discussed at the evening session, but no final action taken. The action taken by the Secretary in regard to midwifery schools was approved and recognition of the diplomas of the spring session of this year refused.

Consideration of various sanitary and other matters engaged the attention of the Board until 10 o'clock P.M., when an adjournment subject to call was had.

THE ADVANTAGES of "sterilized" milk cannot be overlooked. Send to the Malted Milk Co., Racine, Wis., for a sample of "Malted Milk."

BOOK REVIEWS.

Railway Surgery. A Practical Work on the Special Department of Railway Surgery, for Railway Surgeons and Practitioners in the General Practice of Surgery. By C. B. Stemen, A.M., M.D., LL.D., Professor of Surgery in the Fort Wayne College of Medicine; Surgeon to the St. Joseph Hospital; Chief Surgeon of the Western Division of the Pittsburgh, Fort Wayne and Chicago Railway, etc. 1890. J. H. Chambers & Co., St. Louis. Price $3.00

This excellent treatise, for which there will, undoubtedly, be a great demand, dealing as it does with a subject to which little of special literature has been devoted, comes to us fresh from the press. It will be appreciated especially by the great army of railway surgeons who already recognize the fact that in the treatment of railway injuries no special instructions are given in the great majority of medical colleges, and that no text book on surgery especially treats of this class of cases.

In recognition of these facts the author has prepared this book, drawing not only from his own wide experience as a railway surgeon, but also from that of many of the leading lights of the American Association of Railway Surgeons. As this is a practical subject, to which little of a purely theoretical nature is applicable, it is essentially a practical work, giving, in a concise and readable form, the principles that should guide the surgeon in the determination of the ever and oft recurring questions as to the proper time for amputating, and the most approved methods of its performance, the influence of shock on the treatment of cases, etc. Illustrations are provided in sufficiency.

The typography, paper and binding of the book are excellent.

Uses, Tests for Purity, and Preparation of Chemical Reagents, Employed in Qualitative, Quantitative, Volumetric, Docimastic, Microscopic and Petrographic Analysis; with a Supplement on the Use of the Spectroscope. By Charles O. Curtman, M.D., Professor of Chemistry and Director of Chemical Laboratory in the Missouri Medical College. 1890.

All who have had the pleasure of listening to Dr. Curtman's lectures on Chemistry, and of working with him in the laboratory will appreciate the opportunity presented by this book of consulting with him at any time on the mysteries of chemical incompatibilities, of application of tests and the detection of the various poisons, etc., without trying to further decipher the Egyptian hyeroglyphics in their much thumbed notebooks.

But the especial object aimed at in the present volume is the description of the various reagents and tests used in analysis, with the exposition of means and methods for the recognition of purity or impurity in the chemicals sold for such purposes.

The spectroscope, which has assumed such importance

in the chemical world of late years, receives the attention of the author in a large part of the book. A number of blank leaves are inserted for additional notes by the reader. The illustrations are numerous and well executed, the binding and typography excellent. In short, this is a valuable work for the chemist or analyst, containing in a compact and handy form a great amount of information concerning the more recent methods of analysis which could only be obtained by delving through the large quantity of journal literature of late years.

Woods' Medical and Surgical Monographs, Vol. VI, No. 1, April, 1890, containing:

I. The Human Foot: Its Form and Structure, Functions and Clothing. By Thomas S. Ellis, M.R.C.S., Consulting Surgeon to the General Infirmary at Gloucester.

II. Modern Cremation: Its History and Practice. By Sir H. Thompson, F.R.C.S., President of the Cremation Society of England, etc.

III. Aphasia: A Contribution to the Subject of the Dissolution of Speech from Cerebral Disease. By James Ross, M.D., LL. D., Aberd.; F.R.C.P.; Senior Assistant Physician to the Manchester Royal Infirmary.

The Same, Vol. VI, No. 2, May, 1890, containing:

I. Insanity at the Puerperal, Climacteric and Lactational Periods. By Wm. Bevan Lewis, L.R.C.P. (Lond.), M.R.C.S., Medical Director West Riding Asylum, Wakefield; Lecturer on Mental Diseases at the Yorkshire College.

II. Treatment of Diseases of Women by Massage. By Dr. Robert Ziegenspeck, Munich.

III. The Treatment of Internal Derangements of the Knee-Joint by Operation. By Herbert Wm. Allingham, F.R.C.S., Surgeon to the Great Northern Central Hospital; Surgeon to the Surgical Aid Society; Assistant Surgeon to St. Mark's Hospital for Fistula, etc.; Late Demonstrator of Anatomy at St. George's Hospital.

IV. The Idiopathic Enlargements of the Heart. By Dr. Oscar Frænzel, Professor in the Berlin University and the Military Medical Chirurgical Academy; Supervising Physician in the Charite Hospital; Superior Staff Physician and Regimental Physician in Berlin.

Published monthly by Wm. Wood & Co., of New York, at $10.00 a year; single copies, $1.00.

Our readers, already acquainted as they are with this well-known and highly valued series of monographs, presented in so handsome and yet inexpensive a style by the Messrs. Wood, have no doubt anticipated the pleasure as well as instruction to be derived from the last two volumes above mentioned.

Neurology comes in for a large share of attention in the contributions of Dr. Ross and Mr. Lewis. Motor aphasia, sensory aphasia, and combined motor and sensory aphasia are treated of in separate chapters, while their morbid anatomy and "morbid physiology," and their relations to the nervous mechanisms of speech, and the pathology of apperceptive aphasia, appear later.

The practical and interesting topic of diseases of the foot is clearly and comprehensively elucidated by Mr. Ellis. Colored plates show the anatomy of the parts to advantage.

The History and Practice of Cremation, a method of disposing of the dead which is rapidly coming into vogue, should be read by all who desire to keep posted on medical topics of the day. The same may be said concerning the monographs on the application of massage to the treatment of the diseases of women.

Electricity in the Diseases of Women, with Special Reference to the Application of Strong Currents. By G. Betton Massey, M.D., Physician to the Gynæcological Department of Howard Hospital; Late Electro-therapeutist to the Philadelphia Orthopædic Hospital and Infirmary for Nervous Diseases; Member of the American Neurological Association, etc. Second Edition, revised and enlarged. Being No. 5 in the Physicians' and Students' Reading Reference Series, published by F. A. Davis, Philadelphia and London. $1.50 net. 1890.

Our readers have from time read with interest the able able articles of Dr. Massey on electricity and its application to the cure of diseases of women, so that an introduction, or a commendation of his ability in the direction spoken of is wholly unnecessary. While avoiding the position of the "electrical crank," he presents with the emphasis of conviction of their value, the methods of treating many of the diseases and disorders of womanhood by electricity. And again, refraining from the launching of soaring theories, he confines himself more to the deductions to which he has been led by his own clinical experience. The writings of others are not ignored, however. In the introductory part of the work, the author has aimed to "briefly present the laws of electricity, as applied to this branch of medicine and surgery, in so concrete and practical a shape that the conscientious student is insensibly made to comprehend current proportions as he would after prolonged mathematical study.

The illustrations are fair.

How to Preserve Health. By Louis Barkan, M.D., Brooklyn. Trade supplied by the American News Co., New York. 1890. Cloth, $1.00.

This is a good, wholesome practical book, full of 'common sense' and sound advice. It is a book for the layman to study and the physician to scan. In it the latter will find much that he immediately recognizes as sensible, but of which he had not thought before. It does not conflict with the work of the profession, but on the contrary, is liable to prove of valuable assistance to the doctor who puts it into the hands of his families.

LITERARY NOTE.

ANNALS OF SURGERY.

The current (July) number of this standard exposition of scientific surgery is, as usual, replete with matter of great value and interest. The four original contributions will claim attention not only from the standing of their authors, but also on account of the intrinsic value of the productions and the rarity of some of the conditions written of and the consequent paucity of literature on the subjects. Appended to Dr. P. S. Connor's paper on the Surgical Treatment of Tumors of the Bladder, is a tabulated report of 142 cases which were operated upon. Dr. C. H. Mastin writes on Lumbar Hernia, and Dr. W. W. Keen details some new methods of compressing the subclavian artery, and of ascertaining whether the bladder is ruptured or not. Drs. F. X. Dercum and J. Wm. White present conjointly a further report of results obtained in a case of removal of the posterior wall of the spinal canal and opening of the dura mater spinalis in the upper dorsal region for paraplegia.

The editorials are on the Etiology and Treatment of Acute Peritonitis; and the Etiology of Acute Suppuration.

The Index of Surgical Progress contains the usual budget of surgical news, abstracts and digests of surgical literature in general.

SELECTIONS.

NEURASTHENIA IN ITS RELATION TO MENSTRUAL PAIN.

The subject of menstrual pain has been so written about and discussed that there remain no points of bright and shining newness to elucidate. I am afraid, though, that with all the richness of literature, the growing tendency is to totally ignore the nerve element and to solely consider the uterus as the first and exciting factor. It is well to bear in mind that the physiological process, or act of act of menstruation, differs in no wise from other physiological acts in respect to its dependence for regular and painless performance upon a well and evenly balanced nerve force. Let this nerve influence be perverted, and we have dysmenorrhœa with partial amenorrhœa,or, possibly menorrhagia, and still the uterus, *per se*, may be without a vestige of fault.

Disturbances of this class are continually occurring, and, whilst a truly and normal menstrual discharge should be a free, painless monthly flow, we rarely see such perfect physiological action. This is hardly to be wondered at when we recall the important part which the organs of generation play in the economy of woman and their active existence between puberty—their functional birth, and menopause—their death.

Pain is the most frequent departure from the plane of health, and simple pelvic distress, or acute agony, mark the extremes of discomfort, incapacitating only for more active duties, or transforming our patient into a suffering, hysterical invalid, not only for the four or five days of menstrual flux, but often, with diminished severity, during the intermenstrual period. Vagaries of mind and suffering of body go hand in hand, increasing in severity as the patient approaches the age when increased sexual activity demands increased nerve control and blood supply. How much of this loss of nerve control is due to the menstrual pain, and to what extent the pain is the direct result of vaso-motor disturbance, is one of the difficult problems frequently made but little clearer; even by a local examination. A vast number of our so-called dysmenorrhœic girls need more treatment for exhausted nerves and impoverished blood-vessels, than for uterine or ovarian lesions. They have the back-aches, the head-aches, the side-aches and pelvic-aches of nerve-tire, the pelvic organs being dragged as willing factors into this battle of nerves. These girls reach pubescence tall, thin, book-crammed wrecks, overwrought mentally, without a single well-developed muscle. Theoretically, the uterus and ovaries are expected to open up the menstrual life in a perfectly physiological manner, as much as though they were not part and parcel of the general physical wreck. Practically, they do no such thing; they wait for increased development, and at best (or worst) become, like other impoverished organs, fitful and irregular in action, and the foci of pain. It is an easy matter to place upon these local exhibitions of a general lesion a wrong valuation. They are positive indications of pelvic trouble of primary or secondary import, and the patient undergoes an examination by the vagina. What do we find? An illy developed cervix and uterus, with the body anteflexed. There is some erosion of the cervix, with more or less catarrhal discharge. (And, by the way, there will be this same flabby catarrhal condition of the throat and nose, not due to the oophoralgia and uterine catarrh, nor they to it, but all sequelæ of one cause.) Both ovaries are tender, and perhaps enlarged sufficiently to be outlined. Then you introduce the sound to the internal os, and there is evidence of stricture with increased sensibility. By the examination without ether there is nothing which would positively distinguish, in this condition, the truly-spasmodic stenosis from that of permanent narrowing, though in the nervous cases there is generally—or, I might say, always—more tenderness at the constricted point. Under ether, when this stenosis disappears and the canal becomes quite patulous, there is positive proof of a uterine and ovarian exhibition of a neurasthenic condition.

But you say: "Is it necessary to examine every virgin who suffers at her monthly periods? Are there no closely drawn points in symptomatology by which the truly surgical cases may be separated from the purely nervous ones?" That there are these two classes of cases we cannot but admit, and the symptoms in one differ widely from those of the other.

Let me cite the following history from my case book:

Annie M., æt. 18 years, single. Puberty at 13½ years. Menstrual discharge was irregular in its appearance until after 14 years of age, when it became regular and not painful. Since the age of 16 years, there has been gradually increasing pain at every period, or, more truly speaking, commencing two or three days before the period, and dimishing in severity as the flow becomes established. This pain is more or less continuous—is not intermittent; it is a throbbing pain, and seems to have its points of greatest severity in the ovarian regions, extending to the uterus and down the inside of the thighs. Frequently this is accompanied by nausea and vomiting. The menstrual discharge is not clotted, and is somewhat higher in color than normal. The ovaries are tender by abdominal palpation, and the spinal hysterical spots are well-marked. This is the physical history. Now is there a social defect which wil bear a causative relation to this condition?

At the age of puberty our patient was a girl of about average strength, living in a small town. When hardly 16 years of age she was sent to a city school, where she remained about nine months in the year. Here was undoubtedly the disturbing factor. How frequently we find this same menstrual disturbance in girls who have left green fields and fresh air to overstudy, to work in factories, or stand behind counters! It is the menstrual oophoralgia of nervous girls, of neurasthenia, of nerve-tire, and is to be relieved by tonics, good food and fresh air, and increased by vaginal examinations and worse than useless uterine interference.

My first effort would be to relieve my patient of all undue mental and physical strain. The bowels are generally constipated, and should be kept just slightly relaxed. The skin is dry and almost bloodless, the hands and feet are cold, with hot head and dull eyes. Sponge bath followed by thorough friction soon start a more active peripheral circulation. For the first few weeks the medication consists of a mineral acid combined with a simple bitter as, perhaps, nux vomica.

When the bowels are normal in action, when the skin is less dry and the tongue is clean, then I give iron in such combinations as suits the case in point.

If there is intermenstrual ovarian pain, I know of no better agent for its immediate relief than a current of galvanism passed from the sacral region through to either ovarian region. This has never failed me, except in such cases as where the ovaries have undergone great interstitial change.

Where there is neurasthenia acting as first cause, a general tonic treatment will effect a cure without surgical interference, but there is a large class of patients in whom this nervous, broken-down condition is the sequel of a primary uterine lesion.

Let me cite now, in contradiction to our case of neurasthenia, one in which the history is directly that of obstruction:

Mary Y., æt. 36, married, sterile. Puberty at the age of 14. Always had pain at menstrual periods. This pain has increased since marriage. It commences a few hours before the appearance of the flow and continues through the whole period. It is markedly a "come and-go" pain—expulsive in character. The discharge comes in gushes preceded by pain and is generally clouded.

In such a case as this we are most apt to find a rigid stenosis at the internal os. The intermittent character of the pain would of necessity call our attention to the uterus in its expulsive efforts to expel its contents. Unlike the small ill-developed uterus of our neurasthenic patient, it is even larger than normal with this congenital narrowing of the cervix. If there are nerve phenomena and hyperæmic ovaries, they are secondary to the uterine lesion and will not disappear until a free outlet to the menstrual flow is established.

A cervical stenosis, non-spasmodic in character, is always the primary trouble, and it is as impossible to cure such a condition by rest, treatment and tonics as to relieve a neurasthenic dysmenorrhœa by dilatation alone.

Bear in mind, then, the existence of a dual source of menstrual pain—in one the neurasthenic condition as a primary condition; in the other a primary surgical narrowing with many reflex conditions which disappear completely by local treatment.—Wm. M. Taylor, M.D., in *Med. Age.*

RUPTURE OF THE PERINEUM AND RECTO-VAGINAL SEPTUM DURING FIRST COITION.

A previously quite healthy, newly-married young Hebrew woman, æt 23 years, of middling size and make, applied to the author on account of pain on walking and defecation, which symptoms had appeared after her first marital intercourse two days previously. She added that the coition had given rise to an excruciating local pain and profuse bleeding, causing her to faint. The examination showed that the woman's external genitals were developed quite normally, and that the hymen (of a semi-lunar variety and a moderate thickness) was intact. On separation of the major labia, the posterior commissure proved to be lacerated, the wound forming a funnel-shaped cavity admitting freely two or three fingers and communicating with the rectum just above the anal sphincter; the vagina contained fæcal gases and matter. There was also present a total rupture of the perineum running along the raphe, but involviug only the skin and sub-cutaneous cellular tissues.

An operative treatment was proposed but declined by the patient.

Dr. Sinaisky discusses at length the question concerning the etiology of the severe lesions found in his patient. He does not entertain any doubt whatever that they were actually contracted during the coition. The patient's husband proved to be a robust young

man, æt. 23 years, possessing a large sized member, but no knowledge concerning marital business (at least he stated that he had never yet had intercourse with women until the present occasion). Since the couple most emphatically declared that neither of them had introduced finger or any foreign body into the woman's genital tract, and since all their statements seemed to be altogether trustworthy, the author arrives at the conclusion that the lesions were inflicted solely by some violent and wrongly directed pressure of the inexperienced young man's powerful and stiffly erect penis against the base of the hymen, the woman, possibly, lying in some inappropriate posture. The violence might be intensified by virtue of the attempt at coition being undertaken with retracted prepuce (Masalitinoff, Harris, Boriakovsky) the young man being a circumcised Hebrew.

Reviewing the literature of the subject, the author points to the following instances of similarly severe injuries to female genitals during coition:

1. Albert's case ("Hoffman's Handbook of Forensic Medicine"), referring to an Arabian girl, æt. 11 years, in whom the first intercourse with her husband, a robust lad of 16, caused the rupture of the posterior commissure, navaicular fossa and vaginal fornix, the latter communicating with the abdominal cavity.

2. Toulmouche's (*ibid.*) of rupture of the perineum in a ravished girl, æt. 25 years.

3. Zeiss's (*Centralblatt fuer Gynæcologie*, No. 8, 1886) of laceration of the vaginal roof during coition performed in an elbow-knee posture about six weeks after a forceps labor.

4. Chadwick's (*Boston Med. and Surg. Jour.*, April 30, 1885) of rupture of the vagina in a sterile woman, æt 48 years.

5. A. G. Masalitinoff's (*London Med. Rec.*, May, 1886, p. 214) case of rupture of the peritoneum in a weak chlorotic Hebrew woman, æt. 24, the lesion taking place during the first coitus with her athletic husband who performed the act in a drunken state.

6. Masalitinoff's case (*ibid.*) of vesico-vaginal fistula occurring in a Georgian woman, æt. 18 years, during her first coition with her husband.

7. Afanasy N. Boiakovsky's (*Vratch*, Nos. 46 and 47, 1886, p. 821) case of rupture of the perineum and vulvo-rectal fistula in a peasant woman, æt. 17 years, who had undersized external genitals, abnormally short genital slit (the distance between the urethral orifice and posterior commissure being not more than 2 cm.), a deep depression (*cul de sac*) on the posterior periphery of the vestibule, a narrow pelvic arch (the angle being only 62° against the standard 90° to 100°) and a subnormal inclination of the pelvis (40° against the standard 60°). The patient's husband was a robust peasant, æt. 24 years, with a large sized penis and a retracted foreskin. The first coition was exceedingly painful. On the next morning fæcal gases, and on the third day fæcal matter began to escape from the woman's genitals. The fistula was successfully closed by Prof. G. E. Rein about 3 years later.

Dr. Linoisky's collection may be supplemented by the following cases:

1. W. A. Esipoff's case (*London Med. Rec.*, May, 1886, p. 214) of rupture of the urethra occurring during first coition in a young woman, æt. 19 years, with imperforate hymen and 2,000 cub. cm. blood pent up in the vagina and womb.

2. J. Price's (*Am. Obst. Gaz.*, May, 1886) of vulvo-rectal fistula arising during the first coitus in a woman, æt. 22 years.

3. Duguer's (*Vratch*, No. 47, p. 843, 1886) of rupture of the perineum and vagina during the first intercourse with the husband possessing a big penis and performing the act in a very rough and violent manner.

4. Blumenthal's (quoted by Price, *i. c.*,) of vulvo-rectal fistula, operated by Spencer Wells in 1860.

5 and 6. Diemerbroick's cases (*Anatomia Corporis Humani*, quoted by Boriakovsky, *i. c.*) of rupture of the vagina referring to two newly married young Dutch women, both of whom died from acute anæmia caused by hæmorrhage.

7. Liman's case ("Hoffmann's Handbook") of rupture of the perineum.—Dr. Roman L. Sinaisky (Slutzk, Russia) in *Russkia Meditzina*, No. 46, p. 711, 1889.

DURATION OF PREGNANCY AND EPOCH OF CONCEPTION.

The new German civil code in its articles 1467 and 1572, contains important reference to the epoch of conception. This term among jurists is synonymous with duration of pregnancy among physicians. For living children this period is limited to 180 to 300 days, both inclusive. A child born in matrimony is always to be considered legitimate unless the husband denies cohabitation during the period limited as above. By the term *living-born* child, forensic medicine usually understands one which has breathed before parturition was completed. Now, fœtuses of 180 days are susceptible of respiration, but so are those of 170 or 160 days; hence the limit fixed by the code is too large. As to the term *vitality*, if this means capacity for continuous existence, the period of 180 days is too short, for only those who have reached 189 to 196 days of development have, as a rule, *vitality* in this sense.

Again, the limit 300 days is too short, for pregnancy has often continued 310 to 320 days; and the author has had one which continued 424 days. Hohl, Matthews, Duncan and Kroche have fixed the extreme limit at 336, 325, and 330 days respectively. With cows the normal duration of pregnancy is 280 days, but it may extend to 321. In extra-uterine pregnancy, it has been demonstrated that the fœtus may remain alive for weeks after the termination of the normal period.

The following propositions are therefore suggested:

1. If respiration is to be considered evidence of a

living child, the limits for that function should be fixed at 160 to 165 days.

2. If there is a question of vitality rather than mere ability to breathe, the limit should be fixed at 195 days.

3. The extreme of 300 days should be lengthened to 320 to 325. For widows the period of 320 days may be established as a maximum period to establish legitimacy.—A. F. C. in *Ann. of Gyn. and Pæd.*

URINARY, URETHRAL, OR CATHETER FEVER.

The author concludes a comprehensive paper as follows:

1. In operations for the relief and cure of chronic retention of urine the complete evacuation of all the urine at first should not be permitted, but rather the withdrawal of only a few ounces, and the immediate injection of a solution of boracic acid or other mild antiseptic, in volume equal to one-half the quantity of urine withdrawn, lessening with each succeeding injection the quantity of fluid thrown in, and increasing the amount of urine withdrawn. Thus, by regular gradation the bladder is emptied, and the circulation, in its abnormal wall, is accommodated by degrees to the new order of things. The same may be said of the ureters and kidneys. As a result, we have less shock, if, indeed, any; no suppression of urine; no hæmorrhage from the urinary organs; and slight, if any, urine fever, so-called.

2. Tight strictures of the membranous urethra are more successfully, and hence more safely, dealt with by perineal section. When associated with strictures of the pendulous urethra, the combination of internal and external urethrotomy is undoubtedly the best treatment.

3. The decomposition of blood, urine, and other organic matter in the bladder or urethra, may give rise to the phenomena through the production of ptomaines; hence the necessity for antiseptic treatment, generally and locally.

4. The disease is more common among those who are predisposed to it by the nature of a peculiar nervous temperament.

5. In view of the fact that more or less shock attends all urethral operations, especially the forcible and rapid dilatation of old strictures with sounds; and as sudden death has followed even the gentle insertion of a sound, the calibre of which was less than the stricture, it is hence important than all practical precautions should be observed in every case of dilatation of a urethral stricture or strictures, with a view to avoiding, so far as possible, such effects, that unhappy sequel being more liable to follow rapid dilatation of old strictures when not preceded by internal urethrotomy.

6. It is also important to ascertain the condition of the bladder, urine and kidneys before operating for stricture of any degree, and when these two organs are found extensively diseased, the greatest skill, gentleness and patience are necessarily called for in the treatment of strictures. Further, when these organs are diseased, and we have to deal, in a given case, with several strictures of very small calibre of the pendulous urethra, two courses compatible with safety are presented, viz.: gradual dilatation alone, or internal or external urethrotomy, leaving a few days between the internal and external operations, the latter being done first.

7. Quinine, in any quantity, exerts no manifest influence over the course of the disease.

8. Boracic acid, internally, by its resolvent and antiseptic action doubtless does exert a favorable influence upon the disease, and will prove a prophylactic if given some days before operating.

9. With a further view to prophylaxis, both before and after all operations upon the urethra—even simple catheterism—the canal should be injected with some mild antiseptic. This is more essential after each act of micturition, subsequent to internal urethrotomy.

10. When urine fever persists despite all treatment, or should, after any operative interference with the urethra, jeopardize the patient's life, perineal section should certainly be done.

11. I believe the disease in some instances to be one resulting from the escape of micro-organisms into the circulation. In others it is due to the absorption of their products at the points of operation. It is probable that in some cases the absorption of these products, and those of tissue disintegration, takes place at different points throughout the genito urinary tract. In other words, in some it may be a septicæmia, in others a sapræmia. I think, so far as our knowledge goes, we may have both acting at one time.—C. G. Buchanan Klophel, M.D. (Rochester, N. Y.), *Therap. Gaz.—Annals of Surgery.*

PRINCE BISMARCK AS A PATIENT.

Prince Bismarck used to have the reputation of thinking anything but nobly of the medical profession, and his differences of opinion with the late Professor Frerichs as to the pathology and therapeutics of that important political organ, the liver, were expressed in language more familiar perhaps to scientific controversialists than to diplomatists. It is probable that the great statesman was a refractory patient, but bitter experience seems to have taught him that throwing physic to the dogs is not the most satisfactory treatment for the growing infirmities of age. He is now, according to a statement which he recently made to a representative of the *Daily Telegraph*, a model patient, paying the most exemplary obedience to the counsels of his medical adviser, Professor Schweninger. The Prince some years ago was in some danger of becoming the largest as well as the greatest man in Germany, but Dr. Schweninger relieved him of the growing load of "too, too solid flesh," by the judicious application of

Oertel's method, which has been made known to English readers by Dr. Mitchell Bruce and others. The details of the Prince's present dietetic regimen may be interesting to those interested in the treatment of obesity. He says: "I am only allowed to drink thrice a day—a quarter of an hour after each meal, and each time not more than half a bottle of red sparkling Moselle, of a very light and dry character. Burgundy and beer, both of which I am extremely fond of, are strictly forbidden to me; so are all the strong Rhenish and Spanish wines, and even claret. For some years I have been a total abstainer from all these generous liquors, much to the advantage of my health and my 'condition,' in the sporting sense of the word. Formerly I used to weigh over seventeen stone. By observing this regimen I brought myself down to under fourteen, and without any loss of strength—indeed, with gain. My normal weight is now 185 lbs. I am weighed once a day, by my doctor's orders, and any excess of that figure I at once set to work to get rid of, by exercise and special regimen. I ride a good deal, as well as walk. Cigar smoking I have given up altogether; it is debilitating and bad for the nerves. I am restricted to a long pipe, happily with a deep bowl, one after each meal, and I smoke nothing in it but Dutch Knaster tobacco, which is light, mild and soothing. Water makes me fat, so I must not drink it. However, the present arrangements suit me very well." Had Prince Bismarck shown himself as amenable to medical control in his robust prime as he finds himself compelled to be now, he would not perhaps have to submit to so strict a rule of life in his declining years.—*Brit. Med. Journal.*

INCONTINENCE OF URINE IN CHILDREN.

Dr. A. Jacoby writes as follows upon the treatment of incontinence of urine in children (*Archives of Pædiatrics*, June, 1890):

Attention must be paid to the capacity of the bladder. In every case, particularly in the evening, the quantity of fluid should be restricted. The sigmoid flexure and the rectum must be empty in the night, and the patient should be encouraged to evacuate both bladder and rectum before retiring. After a few hours' sleep the children ought to be taken up and roused sufficiently for both purposes.

Muscular debility of the neck of the bladder requires general and local stimulation. Strychnine or other preparations of nux vomica prove effective, to a certain extent, by improving both the general innervation and the appetite; in desperate cases an occasional subcutaneous injection into the perineum (gr. $^1/_{40}$ to $^1/_{16}$) has rendered good service; an ointment of 1 part of extract of nux vomica in from 10 to 16 parts of fat, introduced into the rectum, in pieces the size of a coffee or lima bean, several times daily, will also act well and can be continued for some time. The same indication is fulfilled by ergot, the fluid or the solid extract of which may be employed internally. The interrupted electrical current is perhaps the most powerful local stimulant; one of the electrodes must be applied to the perineum, the other to the hypogastrium or the lumbar region. It is not advisable to apply one pole to the interior of the urethra or bladder, because of the danger of urethritis and cystitis.

Whenever there is oxalic acid or sugar, or an excess of urates and phosphates in the urine, the source of the disturbance must be attended to. The hyperæsthesia of the bladder, complicated or not with catarrh, requires belladonna or its alkaloid. In many cases a single evening dose of extract of belladonna (gr. $\frac{1}{4}$ to $\frac{3}{4}$ to 1) or sulphate of atropine (gr. $^1/_{100}$ to $^1/_{75}$) answers well, sometimes to an unexpected degree. Bromide of potassium (grs. vj to xxv), camphor (gr. ij to v) fluid extract of hops (♏iv to x), or the elixir humuli of the National Formulary in teaspoonful doses, given at bedtime, are also useful.

Irritability of the neck of the bladder and the prostatic part of the urethra has been treated by Henry Thompson with cauterization by means of a 2% solution of nitrate of of silver. A solution of 1 to 1000 will be found sufficient, or a solution of tannin or alum 1 or 2 to 100. A still better plan is to introduce either an elastic catheter or a metal sound into the bladder every few days, for two or four minutes. A few drops of a solution of cocaine instilled into the urethra a few minutes before the insertion of the instrument will in many cases render general anæsthesia superfluous.

UNUSUAL MODES OF INFECTION WITH SYPHILIS.

Dr. R. W. Taylor reports a number of cases illustrating the variety of methods by which syphilis may be acquired (*Journal of Cutaneous and Genito-Urinary Diseases*, June, 1890.) The most singular of the series is the following:

A lady, aged thirty-six, in perfect health, lived with her husband, and with them a lady friend resided as a companion. In July, 1886, the mistress of the household complained of an ulcer on the lower right eyelid near the inner canthus, which gave her great uneasiness and inconvenience by reason of the constant lacrymation. When first seen by Dr. Taylor this lesion presented a characteristic nodular induration and a raw exulcerated surface. The corresponding ante-auricular ganglion was much enlarged, while those of the neck were less hyperplastic, though later they all became markedly enlarged and typically syphilitic. A diagnosis of syphilitic chancre was made at once, but the question of its source was then unanswerable. After much inquiry and questioning it was ascertained that the lady's maid had been suffering from syphilis for some months, and that just prior to the infection of her mistress she had had pharyngeal and labial mucous patches. All

possible modes of mediate infection suggested by the case were examined into, and it was finally decided that infection must have occurred by means of a towel, for the servant after a time reluctantly confessed that she had several times wiped her mouth with the "corner of a towel."

The initial lesion on the lady's eye yielded kindly to treatment, and in due time was followed by general secondary manifestions. Under treatment these disappeared, and for about six months the patient passed from observation. Toward the latter part of this period she was very negligent in following the prescribed treatment, and when next seen she was in great mental distress, and told the following story: She had for two or three months suffered from sore mouth and tongue, but had faithfully used a gargle (bichloride, tincture of myrrh, and water) which had been given her. At irregular intervals she had used chewing-gum very freely during the day, and once or twice noticed, on removing it from the mouth, that a little blood adhered to it. On two occasions when she was thus chewing gum she had temporarily placed her bolus on some article of furniture, from which it had been taken by mistake and chewed for some time by her female companion. As she had received stringent instructions as to the prevention of the spread of the disease to her husband and her companion, she was on each of these occasions somewhat troubled in mind and on the alert. For two weeks her companion had complained of a sore just within the lower lip on the right side, which had failed to disappear under the use of borax, alum, and other domestic remedies. The lady's friend was in ignorance of the nature of her trouble, but stated that in brushing her teeth a few weeks before she had abraded the lip, so that it was painful, and that the sore thus produced had not healed. Examination revealed a typical indurated chance of the lower lip and marked submaxillary and cervical adenopathy. In due time roseola and rheumatoid pains ushered in the secondary period of syphilis.

Other cases are reported showing that syphilis may be acquired while making an autopsy on a syphilitic subject; that it may be inoculated by a caustic-holder which has been used in the treatment of syphilitic lesions; and that handkerchiefs, bathing-suits, syringes, adhesive plaster, water closet seats, pillows, and razors may each be the medium of infection.

Thiersch's Method of Skin-Grafting.—In a thoroughly practical paper upon skin-grafting, Mr. W. Watson Cheyne gives the following advice upon the methods to be employed (*Practitioner*, June, 1890):

1. The proper time for grafting is when cicatrization is distinctly advancing at the borders of the wound. If we wait much longer than this an unnecessary amount of granulation tissue will form, and the contraction of the scar will be excessive.

2. Before attempting to graft, the surface of the ulcer should be aseptic; if it is not, suppuration between the granulations and the graft will prevent union. Asepsis of the sore is best secured by washing the surrounding skin with carbolic and sublimate solutions mopping the ulcer with zinc chloride solution (40 grains to the ounce), then dusting it with iodoform, and dressing with borated lint which has been dipped in a 1 to 2,000 sublimate solution. Excepting the zinc chloride, this treatment should be repeated for several days before applying the grafts.

3. Just before grafting, the superficial layer of the ulcer should be shaved or scraped off, checking hæmorrhage by the pressure of a sponge under which is a piece of protective.

4. While the bleeding is being arrested the grafts should be taken, preferably from the thin skin of the flexor surface of the forearm. The skin which is to be used should be shaved and disinfected by scrubbing with a 1 to 500 sublimate solution, then with a 1 to 20 carbolic solution. A strip of skin about one inch wide and as long as desired is then dissected off, avoiding the subcutaneous tissue. The strip is cut into pieces about half an inch long, and planted on the prepared surface. The grafts should be numerous and nearly touching one another. It must be remembered that they shrink considerably.

5. When the operation is completed, the surface is covered with protective, and gentle pressure is made to squeeze out any blood that may be between the grafts and the surface of the ulcer. The remainder of the dressing is boric lint, salicylated cotton, and a bandage. The dressing may be renewed on the third day.—*Med. News.*

Tissue Metabolism in Cancer.—Dr. F. Müller has made some careful comparative observations upon the urine in cases of cancer and other wasting diseases, and in simple starvation. He finds that in the cancerous the excretion of nitrogen far exceeds the amount ingested, and infers that this excess must in consequence be derived from the disintegration of the albuminoids of the body. However, in two out of seven cases this loss was not greater than occurred in other individuals similarly insufficiently nourished. The chlorides were, on the other hand, notably diminished, a fact, he thinks, pointing to the source of the excreted nitrogen—viz., from the organ albumin and not from the circulating albumen. Obviously, however, many diseases share, with carcinoma, in this disintegrating process, as Müller showed to be the case in chronic febrile affections, especially severe forms of malaria, in leukæmia and pernicious anæmia. Previous observers do not coincide in their statements on this head as regards leukæmia. Voit and Pettenkofer found no marked evidence of increased metabolism in this affection, and Fleischer and Penzoldt concurred in this so far as regards mild cases. But in severe cases the last-named find the urea to be increased both absolutely and relatively. Sticker and

Klemperer arrived at the same conclusion. Respecting pernicious anæmia, there is a concurrence of testimony in support of increased nitrogenous excretion. Reverting to cancer, this evidence, Müller thinks, goes to prove that malignant disease excites the formation of metabolic products which are poisonous to the organism. He points out that cachexia develops in the cases of malignant growths, no matter how limited, and without their involving any important organ; whereas a non-malignant tumor may attain great dimensions without affecting the excretion of urea. At the same time no such poison or ferment destructive of albumen can be isolated from cancerous tumors, although the fact pointed out by Feltz, that the urine of the cancerous is more toxic to animals than that of healthy individuals, is, with other facts, highly suggestive of that view.—*Lancet.*

Summer Diarrhœa in Infants.—Christopher gives the following summary on this subject:

1. Various forms of abnormal fermentation occur in the bowels and produce symptoms; they constitute the immediate cause of the collection of diseases known as summer diarrhœa.

2. Summer diarrhœa, so defined, includes putrefactive constipation and all forms of diarrhœa and dysentery not diphtheritic in origin nor symptomatic of septicæmia.

3. The three great predisposing causes of summer diarrhœa, viz.: hot weather, overcrowding, and bottle-feeding are to be regarded as acting solely as adjuvants to fermentation.

4. The diet during summer diarrhœa should be determined entirely by the condition within the bowels, and not by theoretical ideas as to nature's food.

5. At least two well-marked forms of abnormal intestinal fermentation may be recognized clinically, viz : the putrid and the acid.

6. In the putrid fermentation carbo-hydrates should constitute the food, and in the acid form albumen should be the only food.

7. Milk, containing as it does, both proteids and carbo-hydrates, should be prohibited in all forms of intestinal fermentation. When properly sterilized,food can be given; nursing babies with severe summer diarrhœa should be taken from the breast.

8. All food administered, of whatever type, should be aseptic.

9. In addition to regulating the diet on the foregoing principles, the treatment should include laxatives and intestinal antiseptics.

10. The lesions are to be regarded as the results of the fermentation, and are more marked in proportion to the duration of the disease.

11. The lesions assist in prolonging the disease, and, in all probability act by providing a habitat for the micro-organisms, and by their secretions furnishing the micro-organisms with material with which to maintain their biological activity.

12. In chronic cases, where well-marked lesions may be supposed to exist, lavage of the large intestine and of the stomach with appropriate antiseptics is indicated.

13. Opium is contra-indicated, except in persistent acid fermentation which threatens to produce anatomical lesions.—*Arch. of Pæd.*

Vulvo-Vaginitis in Children.—Among twenty-one young children (female) suffering from fluor albus, Spæth could fourteen times prove the presence of the *gonococcus Neisser* in the secretion of the vulva as well as that of the uretha. Of the seven childred free from gonococcus three had oxyuris vermicularis and two were addicted to masturbation, and in the cases of both the other young girls there was a suspicion of rape. In all of these seven patients the urethra was intact, while in those where the gonococci were found a diseased condition of the urethra also accompanied the vulvo-vaginitis.

Transmission of the virus could in most cases be easily demonstrated. Eleven times a gonorrhœa of the mother could be proved, twice also the same disease in the father, and once rape had preceded the trouble (there being at the same time an indurated ulcer). In one case infection took place in the hospital; only in one case could the source of infection be left undetermined.

The secretion of the cervical canal, which was examined in two cases, was free from gonococci, so that it gives the appearance as if virginity afforded some protection against transmission of the gonorrhœal virus to the internal sexual apparatus. The gonorrhœal disease showed itself to be very obstinate, the treatment lasting two to seven and a half months; on an average three and a half months. Eight patients were cured and five improved; the one having the indurated ulcer was sent into the hospital. The therapy consisted of washing out the genitals with warm solutions of corrosive sublimate (1.2000) and the introduction of pastilles of cocoa butter, iodoform and thallin into the vagina and urethra; irrigations with carbolic acid, boro salicylic and chlorine water solutions. The other seven children, in whom no gonococci were found, were more rapidly cured; on an average in two months, and sometimes in half this time. Only one child, in whom masturbation was the cause, had to be discharged uncured.—Dr. F. Spæth, *Munchener Med. Wochensch.*

The Disappearance of Papilloma of the Peritoneum.—In performing an exploratory abdominal section few results are more painful to the operator and ominous to the patient than the discovery of papillary masses disseminated over the peritoneum. Once, and not long ago, any such case was simply given up for good, the surgeon often wondering how it was that the

patient managed, as a rule, to recover from the operation. The experience of specialists has proved, however, that not only are diffused papillomata by no means necessarily malignant or pseudo-malignant but they may even disappear. This has occurred in the practice of the Samaritan Hospital, and Professor Freund has also found that even partial removal of a papillomatous tumor of the ovary may be followed by atrophy of disseminated papillomatous growths. Dr. Flaischlen has collected the literature on the subject, and published a monograph in last year's volume of the *Zeitschrift fur Geburtshulfe.* More recently Dr. Sutugin has related two cases similar to those upon which Dr. Freund's experience is founded. In the first, partial removal of a papillomatous ovary was followed by apparent disappearance of a large mass of papilloma infesting the peritoneum: and ascites, marked before the operation, certainly did not recur. In the second, there was similar infection of the peritoneum, with ascites and disease of both ovaries. The right ovary alone could be removed; it was not only papillomatous, but also bore signs of malignant degeneration in certain places. A year later the patient was living, ascites had not recurred, and the tumor of the left ovary grew but slowly. The peritoneal papillomata had apparently disappeared. The patient became insane, and Dr. Sutugin could not trace her history any further.—*British Med. Jour.*

New Colorado Route.—With the completion of the Fort Scott & Eastern Railway between Rich Hill and Fort Scott, an all Missouri Pacific line is established between St. Louis, Wichita and all points on the Fort Scott, Wichita & Western Railroad, and also between Southwest Missouri points and the West. This line is equipped with Free Reclining Chair Cars and Pullman Buffet Sleeping Cars to Geneseo, where connection is made with all points in Colorado and the Rocky Mountains. See local ticket agents.

Frisco Line.—The most popular route from St. Louis to the famous health resorts, viz., Lebanon, Mo., Eureka Springs and Rogers, Ark., Geude Springs, Kansas, Las Vegas, N. M., and Manitou, Col. For particulars, address D. Wishart, Gen'l Passenger Agent, St. Louis, Mo.

The Certainty of the Doctors.—"But, Doctor, you said last week that the patient would certainly die, and now he is perfectly well." "Madame, the confirmation of my prognosis is only a question of time."—*Fliegende Blaetter.*

Perle Springs.—Tickets can now be obtained at very low rates for the round trip, via Missouri Pacific Railway, to this popular and growing resort. Ticket offices, 102 N. 4th street, and Union Depot.

USEFUL FORMULÆ.

Eczema of the Face in Infants.—Besnier, in the *Annal. de Obst. Gin., y Ped.*, says that eczema of the head presents three forms during infancy. The first occurs in lymphatic and scrofulo-tuberculous subjects, its principal characteristics being moderate pruritus, infarctions of the lymphatic ganglia of the nose and mouth, which may result in tuberculous lesions with abundant secretion. Often there is also phlyctenular keratitis. The second form occurs during dentition. In this form the itching is intense, the head being covered with the eruption. The gums may also be sensitive, and salivation be decided. To soothe the irritation of the gums frequent applications of the following formulæ are recommended:

℞ Glycerini,
Aq. destil., - - - aa parts, 80.
Potass. brom., - - - " 7.
Cocain. mur., - - - - " 7.

If the sleep is disturbed, give four teaspoonfuls, with intervals of an hour each, of the following:

℞ Potass. brom., - - - parts, 7.
Mucil. acaciæ, - - - - " 400.

Topically the following may be used:

℞ Zinci oxidi, - - - parts, 24.
Vaselini, - - - - " 68.

In the third variety there is no itching. The trouble is principally in the skin of the scalp, and is characterized by abundant desquamation of the skin. It may extend to the body and limbs. The hair should be cut off, and the skin of the scalp washed with soap and water, to which a little milk may be added. Then an application may be made of the following:

℞ Resorcin, - - - parts, 7.
Zinci oxid., - - - " 60.
Vaselini, - - - " 900.

Instead of the resorcin three or four grammes of sulphur, or twelve to twenty-four grammes of ichthyol may be used.

In the scrofulo-tuberculous form the affected portions should be bathed twice daily with a mild solution of Van Swieten's liquor, after which an ointment should be applied containing one part of calomel and thirty of a suitable excipient.—*Archives of Pediatrics.*

To Remove Summer Freckles.—

℞ White precipitate,
Subnitrate of bismuth, - - aa ʒj.
Glycerite of starch, - - - ℥iv.—M.

Every second day apply a coating of this preparation to the freckles.

Washing the affected parts with the following lotion mornings and evenings will also suffice to remove them:

℞ Sulpho-carbolate of zinc, - - ʒj.
Glycerin, - - - - - f℥ij.
Alcohol, - - - - - f℥j.
Orange-flower water, - - - f℥jss.
Rose water, - - q.s. ad ℥ f viij.—M.

—*L'Union Medicale.*

LITHOTOMY—LATERAL OPERATION WITH URETHRAL COMPLICATIONS.

BY J. C. MOORE, M. D., OMAHA, NEB.

Mr. C. C. S. æt. 62 years; Tennessean; occupation, carpenter; habits strictly temperate; called at my office, April 20,1890, though the kindness of my friend, Dr. J. M. Aikin.

He gave a history of a bladder trouble dating back some nine years, but only for the past two years had he suffered to any great extent.

He had been the rounds, and, as is usual, the case fell into the clutches of a charlatan, who was to cure him right off, with medicine. He asserted that all the instruments he used in such cases was sounds to see how fast the stones were being dissolved. These he introduced from time to time, causing the patient untold agony. The last time he passed the sound he caused considerable hæmorrhage, with subsequent inflammation, which subsided in about ten days. The doctor(?) informed the patient he had reduced the stone from the size of a smoothing-iron to that of a large walnut (a result quite gratifying), but did not want the patient to be talking to other physicians about the case;but on learning the man's money, like his vitality, was fast ebbing away, his interest turned in the direction of getting his patient out of the city, that he might not suffer through the exposure of his nefarious practice.

In passing a Thompson's stone-searcher I had no difficulty in finding the calculi, but did not discover any urethral trouble more than considerable tenderness (having passed the searcher with the joint out towards the scrotum until it passed the transverse ligament, as suggested to me by G. Wiley Broome of St. Louis). Dr. Aikin, in passing the instrument after the usual manner, discovered a false opening just below the bulb. In making further examination I found the laceration as Dr. Aikin had said, but we could not tell to what extent the urethra was injured. However, we decided to operate as soon as the patient could be got in condition, which was accomplished by May 5; assisted by Doctors Aikin, Presnell, Parcell and Winter, the usual incision for lateral operation was made, entering the urethra just below the bulb. In passing in the index finger of left hand I was surprised to find the staff down through the false opening and to the right of the patient's rectum. By making a very careful exploration, with staff withdrawn, I found the lacerated urethra, and, using the finger as a guide, divided from the laceration down to and about ¼ inch into the prostate. Dilating the parts with the finger I had no difficulty in seizing the stones with the forceps, removing three weighing 304 grains. After washing out the bladder, the lacerated urethra was next examined and I found that we had a pocket well down into the tissues between the rectum and bladder, which had to be divided up into the urethra to obtain free drainage, leaving about ½ inch of the urethra immediately below the bulb almost destroyed. The parts were then thoroughly cleansed with a 1 to 3,000 bichloride solution, dried and dusted with equal parts iodoform and boracic acid; a piece of iodoform gauze was placed over the wound and the patient was put to bed.

The urine passed mostly through the wound for five weeks. We were unable to pass the sound until about the beginning of the sixth week. Since then, we have passed the catheter daily, the urine passing naturally, with but little difficulty. He now has complete control of the bladder, passing the water about once every two to three hours. We still have the bladder washed out daily on account of the chronic inflammation, and pass the sound as in external urethrotomy to maintain the urethral caliber. The case has been one of considerable interest to us inasmuch as the staff passed so easily into the false opening, the laceration being so extensive and having existed for at least one month prior to the operation; and also in that there was so little inflammatory trouble with it (there was some pus which was rather offensive, but not what one would expect in such a condition). We secured complete drainage from the bottom of the pocket, through the incision made in opening it up into the urethra, and considering his age and physical condition, we do not consider convalescence unduly protracted only in so far as it encroached upon our time. As Doctor (?) R—— had him until his purse was Shakesperean, we hold on to his calculi, and, as to our reward, we hope to reap that in the golden harvest of the unknown future.

TRANSLATION.

FROM THE FRENCH AND GERMAN.

BY F. NEUHOFF, M.D., ST. LOUIS.

Salol in Angina.

Dr. Gouguenheim has come to the following conclusions:

1. Salol acts efficaciously on acute anginas, whatever may be their cause.
2. It rapidly calms the pain and the dysphagia, which are symptomatic of these painful affections.
3. By relieving the pain, it shortens the duration of phlegmonous angina.
4. It lowers the temperature.
5. It shortens, in almost all cases, the duration of the angina.
6. To get these results, the dose must be less than 4 grammes (one drachm).—*La France Med.*

Antiseptic Treatment of Carbuncle and Tetanus.

Marchisio always treats carbuncle by injections of

solutions of carbolic acid, 1 to 5% strong. In one case he even used pure acid. The injections are repeated frequently, and are sometimes pushed to the commencement of toxic symptoms. All the cases (and some were very grave), that were treated by this method, recovered.

As to tetanus, the author cites only one case. The bottom of the wound was scraped and then cleansed by a solution of warm bichloride of mercury 2 in 1000. The part was then immersed in the bichloride solution for three hours. This immersion was followed by an antiseptic dressing renewed daily. The patient was cured, although presenting grave tetanic symptoms.—*L'Union Med.*

Vaginismus.

Dr. Sinety recommends the following suppository:

℞	Potass. bromid.,	-	.50	(gr. viij)
	Ext. belladonæ,	-	.30	(gr. v)
	Thymic acid,	-	.05	(gr. .8)
	Ol. Theobrom,	-	4.	(ʒj)

M. ft. supposit. No. I.

Simpson praises olive-shaped suppositories, containing a few drops of chloroform.

Tarnier powders the orifice of the vulva and the labia minora with iodoform.

Fraenkel has employed successfully the painting of the parts with 2% hydrochlorate of cocaine solution.

In the case of a fissure, Bouchut recommends suppositories containing 45 grains of rhatany and 75 grains of cocoa butter.

In case these methods fail, it is advisable to try gradual dilatation, and then, if necessary, forcible dilatation under chloroform.—*L'Union Med.*

Intestinal Antisepsis.

In intestinal infection, it is the object of therapeutics to render harmless the living exciters of disease which are lodged in the intestinal tract. This object can be aimed at by administering remedies either per os or per anum. Remedies given per os must be of such a nature as will not be absorbed or altered by the stomach or upper part of the intestinal tract, and which will, therefore, actually reach the desired coils of the bowels. For this purpose, calomel, powdered charcoal, naphthalin, powdered iodoform and salicylate of bismuth have been used.

When given in sufficient doses, these drugs have a certain effect on the contents of intestines; but, being insoluble, they do not affect the intestinal walls, for they are unable to penetrate the epithelium, or even the layer of mucus covering the same.

Antiseptic solutions, on account of the influence which their contact has on the actual exciters of disease, are the best form of remedy. They can, however, only be administered per anum.

That the fluid of an "entero-clysma," or high injection into the bowel, passed beyond Bauhin's valve into the upper part of the small intestine, nay, even into the stomach, is established by the fact that part of the fluid is frequently vomited. This latter fact also proves the upward flow of the fluid by aid of the "antiperistaltic" movement of the intestines.

Inasmuch as the possibility of reaching upper coils of the intestines, and even the stomach, by an enema administered from a reservoir placed 2 to 4 meters above the level of the bed, is now proved, the advantages of intestinal antisepsis, procured per anum, become self-evident.

Besides other advantages, the large amount of fluid which it is possible to introduce through the rectum has certain valuable effects. Thus, by injection of cold fluid, a high fever temperature can be reduced; by the use of hot fluid, as in cholera, a low body temperature can be raised, and a certain stimulation obtained; again, by using a large quantity of water, which will afterwards again pass out, the bowel will be washed out, and a large quantity of bacteria and ptomaines carried away; besides, by absorption the blood will take up larger quantities of water than could be introduced per os, and thus a perfect washing of the blood and tissues will be effected, the water being again excreted by the kidneys, and carrying with it excrementitious matter from the blood and tissues.

Tannic acid is the most important of the remedies for securing intestinal antisepsis by means of clysters. It can be used in ⅓ to 1% solution, and perform the double function of checking the vegetative activity of the bacteria, and of rendering harmless the already formed ptomaines. Especially in cholera does tannic acid fulfil these two indications. For a ½% solution will decidedly check the multiplication of the comma bacillus in meat broth cultures, kept at a temperature of 37° C., and in about six hours most of the bacilli will be killed.

A 1% solution will kill the bacillus in one and a half hours, so that not only will it cease to move under the microscope, but it will be impossible to start new cultures with it in media free from tannin.

Besides this, tannic acid renders harmless the ptomaines of the cholera bacillus, probably by forming an insoluble tannate. When a sterilized culture of comma bacillus in peptonized broth is thrown into the peritoneal cavity of a dog, poisonous symptoms very much resembling cholera poisoning will be produced. When, however, a 6% tannic acid solution is injected along with cholera culture, no poisonous symptoms will occur.

From the above it might be expected that tannic acid would perhaps be effectual against the bacilli and ptomaines of other diseases, as against those of cholera. And clinical experience fully confirms this expectation. Tannic acid enemata have no equal in various intestinal catarrhs and diarrhœas, which are associated with more or less fermentation, and no doubt are dependent on the presence of certain microbes. The tannin, no

doubt, acting as astringent and antiseptic, frequently relieves within a few days, cases of the above disorders which have resisted for a long time treatment per os.

It is likewise an excellent remedy against dysentery, in which disease it also acts as disinfectant and astringent, thus influencing favorably the forming or already formed dysenteric ulcers. Moreover, in the present disease, the introduction of large quantities of water cleanses the bowels of all stagnating material. Of course, gum arabic may be advantageously added to the clysters in case the bowel is much irritated. When there is much pain, an enema of from one to one and a half liters of absolute oil may be preferable. At times, also, it may be best to alternate the latter with the tannin enema.

In abdominal typhus, also, the tannin enema is valuable. Under its use the diarrhœa and meteorism will decrease. In several cases, I saw dangerous meteorisms almost disappear after the second or third enema; and, moreover, the disease assumed a more mild type under the continuance of the treatment.

In the very beginning of abdominal typhus, it seems even possible, by means of tannic acid enemata, to abort the disease. As long as the typhoid bacillus has not penetrated deeply into the organism, and has not altered and proliferated in the more deeply situated organs, it may be hoped, by means of the astringent and antiseptic properties of the tannic acid, and by the acidifying of the intestinal contents, to prevent the typhoid infection which, no doubt, is of intestinal origin.

In ilio-typhus, I have also seen an abortive influence exercised in some cases by hydrochloric acid enemata; in many others by carbolic acid enemata (from 10 to 50 parts of the acid to 2 liters of cold water, to which was added 1 gramme of muriate of quinine). Of course there is always uncertainty of diagnosis in such an early stage of the disease.

In the above cases it is not necessary to kill the bacilli in intestines, and this would, no doubt, be impossible. All that is required is to render their sojourn in the bowel unfavorable, and to prevent their rapid increase.

Of course, as soon as the disease has advanced further, as soon as the bacilli have penetrated deeper into the organism and have established new centers of infection in other parts of the body, as soon as the blood and distant organs have become the seat of the bacilli and the typhoid processes, then intestinal antisepsis, whether secured by tannic acid, carbolic acid or hydrochloric acid, etc., can no longer restrain the progress and course of the disease. Nevertheless, the enema still remains a very useful remedy against the constantly occurring and increasing intestinal infection and its consequences; it relieves the often fatal meteorism; it relieves that portion of the general poisoning which is dependent on intestinal infection and the formation of the typhoid poison in the bowel.—*Cent. f. Klin. Med.*

Phthisis Pulmonalis Arrested by a Fracture.

A man, æt. 62 years, was affected with pulmonary tuberculosis in the second degree, with frequent cough, nocturnal sweats and signs of pulmonary softening. The disease was progressing rapidly, when the patient sustained a fracture of the right femur. The cough was so frequent that it was impossible to keep the subject quiet, for he was forced to sit up each time he coughed. The prognosis was, therefore, very grave, when at the moment that callus commenced to form the cough diminished, the fever disappeared gradually, the night sweats ceased, and amelioration of the general state became more and more pronounced. The patient, who was very much emaciated, became well nourished and the local signs of the disease vanished.

Many years have since passed, but the cure seems to have been permanent.

Crandall, who reports the above case, states that he has had a similar experience with a woman, in whom, likewise, improvement occurred under analogous conditions.—*Le Bull. Med.*

Salve for Lumbo-Abdominal Neuralgia.

℞	Acid. salicyl., - -	ʒiiss.
	Camphor pulverized with ether,	ʒiss.
	Vaseline, - - -	ʒxj.

M. S. Rub slowly a piece as large as a nut into the lumbo-sacral region morning and evening.

This salve will be found useful in neuralgia connected with uterine affections in rheumatic subjects. After the rubbing, which should be prolonged, the painful region must be covered by a piece of flannel, over which is placed some rubber cloth.—*L'Union Med.*

Unna on Insensible Perspiration.

Sensible perspiration is secreted by the sudoriparous glands. Besides this visible transpiration, there occurs continually on the surface of the skin, insensible perspiration. Is this perspiration, the ordinary transpiration, secreted by the sudoriparous glands, but in very small quantities? Or is it real evaporation passing through the epidermis, without the intervention of glandular secretion? This question is of some importance. For in dermatology we make inunctions into the skin, depositing thereon a kind of coating, and it is important to know, if by this treatment we act on the useful secretion, or if we only affect the simple evaporation of water.

The existence of a transpiration purely physical, not at all secretory, appears to me certain. I stretched over a funnel a fowl's skin, freed from plumage and fat. In the funnel I now poured water, and observed that the level of the water lowered itself. It, therefore, must have filtered slowly through the skin and evaporated, after the fashion of insensible evaporation.

I then repeated this experiment, but first covered the

skin stretched over the funnel with the substances used as bases for the different ointments. Some of them had the effect of diminishing the perspiration. Such were the fats and vaseline. But the fats did not have this property alone. Glycerine, which is very soluble in water, restrained equally the perspiration. Lanolin, though also soluble in water, had a similar effect. Caoutchouc and gutta-percha also acted in the same way.

On the other hand, there are other substances which increased this perspriation. These are, principally gelatine and collodion. This might have been expected, for the application of these substances to the skin produces there a sensation of coolness, which is explained by the rapid evaporation which they cause at the site of application, while the substances which retard evaporation produce a sensation of heat.

The action of collodion and gelatine in exaggerating the insensible perspiration may be explained as follows: They contract while drying. As the skin can not retract in the same manner, I suppose that the coat of gelatine or collodion cracks, so that an innumerable number of fissures are produced. Through these evaporation is possible; perhaps even the epidermis itself is similarly fissured.

The fact that the amount of cutaneous transpiration varies with the amount of fats that are spread on the surface of the skin, explains why different physiologists have placed such different estimates on the amount of perspiration.

This practical lesson is to be learned from the foregoing:

An inunction with fat, by preventing cutaneous perspiration, restrains the loss of heat. The temperature of the body rises at the same time, and the kidneys have to eliminate the water which ought to escape by the skin. An inunction of fat, therefore, favors di uresis.

Inversely, if you withdraw fat from the skin, or if you coat it with gelatine, you favor increased perspiration, augment the loss of, and diminish the renal secretion. An inunction with gelatine is, therefore, a good antipyretic.

In nephritis, it is possible to increase the urinary secretion by inunctions of fat, or, on the other hand, to diminish the same by applying to the skin a coating of gelatine.—*Le Bull. Med.*

He Should Have Been Told.—Old Doctor Bilgus had been attending a patient without benefit to the latter, and it was decided to employ another physician. "We'll have to call in another doctor," the patient's father said to Bilgus; "James is getting no better; he's in a high fever"—"Why didn't you tell me he had a fever?" broke in Bilgus; "I've got just as good fever medicine as any other doctor."—*Judge.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., Editor. W. C. MARDORF, M.D., Associate Editor.

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SATURDAY, AUGUST 9, 1890.

Cholera Infantum a Neurosis.

A novel, if not a new, view of the etiology of cholera infantum and the group of diseases allied with it is that advanced by Alexander Harkin, M.D., in the *Times and Register*. He endeavors to demonstrate "that for the group of diseases—including cholerine, cholera infantum, choleraic or summer diarrhœa, cholera nostras, and Asiatic or epidemic cholera—having a unity of essence, an identity of nature, and a neurotic origin, there exists a common principle of treatment, and a reliable therapeutic remedy." He states that he has always regarded cholera infantum and Asiatic cholera as neuroses, and alludes to the fact that Cullen regarded Cholera as a neurosis, while Sir Henry MacCormac taught that it was due to a lesion of the abdominal sympathetic system. This is rather startling, to follow upon the heels of the recent discoveries in relation to the germ origin of disease, and Dr. Harkins will find it necessary to produce better evidence in support of his theory than he presents in his paper, before his views will begin to meet with any considerable degree of favor. Still, whatever Dr. Harkin's views as to etiology may be, if the treatment he recommends be attended with anything like the degree of success which it achieved in his hands, mankind cannot be too grateful to him.

The remedy which he proposes is little short of marvelous in its simplicity and ease of application, when we think of the results it is expected to bring about. It consists in simply developing the inhibitory powers of the pneumogastric nerve, and this is done by counter-irritation over its course in the neck. It is said to be as effective in the algid stage of cholera as it is in cholerine; it is only necessary to apply the liquor epispasticus of the British Pharmacopœia with a camel's-

hair pencil in a narrow stripe over the sheath of the vagus in the neck, extending from the mastoid process to the angle of the lower jaw. The effect is said to be almost instantaneous, the purging, vomiting and cramps immediately cease, and the patient generally falls asleep and awakes cured long before the vesication is complete. Dr. Harkins relies on this topical remedy alone, but is strict on the regulation of diet. Milk is absolutely forbidden in all cases, because of the irritating qualities of casein. The food allowed is arrow-root boiled in water, with the addition of port wine; condensed milk, beef tea free of fat, and starchy food, soda-water, ice-water, barley-water, and a weak solution of chlorate of potash may be given as beverages. Useful auxiliaries are absolute rest, artificial warmth, and stimulant applications to the extremities, as of turpentine and mustard. He reported cases treated by this method, by himself and others, of cholera infantum, and sporadic and epidemic cholera, in which the results were uniformly successful.

The one thing indispensable in this treatment is the stimulation of the pneumogastric nerve.

With Asiatic cholera we have not much to do in this region, but if the results in cholera infantum be one-half as successful as in the cases reported by the author, it would be a great improvment upon present methods of treatment. It will, doubtless, soon receive thorough trial, not only by the bold, but by the cautious practitioner as well, for an advantage in its favor is "that it is at any rate a method of treatment which is attended with no risk, and in no way interferes with any other treatment which the practitioner may see fit to carry out."

The Therapeutic Uses of Thiol.

Dr. A. Bidder, of Berlin, has employed thiol in about one hundred cases, and has observed good results in a certain proportion of them (*Deutsch. Med. Woch.—Deutsch. Med. Zeit.*). He prefers thiol to ichthyol because it is purer, and because it is odorless and easily soluble. Bidder believes that, as a rule, the drug has a rapidly curative action, applied externally, in all acute and subacute skin affections, whether nervous, infectious, or traumatic in nature, and whether caused by chemical or physical influences. The results are also good in certain acute surgical affections of the subcutaneous tissues. It seems to have no effect in chronic diseases of the skin and underlying tissues and in the dermatomy cases; no results need be expected in tuber culous troubles with the skin and lymphatic glands. With these exceptions, thiol may have an excellent effect in a few chronic troubles, such as in fixed perios ticular rheumatism, and in acne vulgaris and acne rosacea, even if only used internally (as a fluid by the drop, in pill form or otherwise, in doses of from 8 to 30 grains and more daily).

Bidder usually employed a mixture of equal parts of thiol and water, or water with glycerin, which was painted over the diseased area with a brush; this was afterwards covered with a thin layer of cotton or a piece of rubber tissue. Sometimes but one application was required, but more often it was needed at intervals of two or three days. Where the trouble is about the face it is sufficient to paint the surface at night, to be washed off in the morning with water, on account of the brown coloration.

Dry thiol is well adapted as a dusting powder for intertriginous portions of the skin and weeping eczema, after the surface has been washed with an antiseptic solution, and for the dusting of excoriations and small wounds, whether superficial or deeply penetrating.

Symptoms of irritation were never observed. Bidder gives the reports of 55 cases, which are divided into the following groups: Eczemas of various kinds, acute and mostly inflammatory processes of the skin and subcutaneous tissues, pernio and periphlebitis, acute articular effusions, œdema, rheumatic affections and contusions, subcutaneous hæmorrhages. In almost every case good results followed the use of thiol; surprisingly rapid were the good effects in erysipelas and similar troubles. Bidder closes his communication by saying that he "can safely say that thiol is one of the most valuable drugs now in our possession, combining as it does, a wide range of action with entire harmlessness."

Modern Surgical Tendencies.

In a recent number of the *Jour. of Am. Med. Ass'n* we find an abstract of a most interesting lecture, by Prof. Duplay, of Paris, delivered at the Charite Hospital, wherein he criticizes certain surgical tendencies which now exist in the profession, as a contrast to those in vogue a decade or two ago. He said that within the past 15 or 20 years a complete transformation has taken place in surgery.

"The introduction of antisepsy in surgical practice has contributed largely to this transformation. It is scarcely 20 years ago, in certain hospitals, and particularly in certain seasons, the smallest surgical intervention, or the most simple incision was followed by the occurrence of terrible accidents, such as lymphangitis, phlegmon septicæmia, pyohæmia, etc. Antisepsy has altered all this; it has considerably diminished the duration of the treatment after an operatiion. Union by first intention, which always failed to take place, is now the rule, and the wound resulting from the ablation of the breast, which took two months and more to cure by suppuration, is now healed by first intention in about eight days. Moreover, thanks to antisepsy, the surgeon can undertake with comparative safety operations which formerly he had not dared to do. He now fearlessly opens the articulations, and practices on the abdomen, in the diseases of the genital organs in women, the most daring operations. But while saying so much in favor of surgical antisepsy, Dr. Duplay pointed to the

reverse side of the medal. He observed that there was a sort of operating mania, a *prurigo secandi* among certain surgeons, particularly among the young generation, which he explained thus: Formerly, owing to the frequency of post-operative accidents, the surgeon decided upon intervening only when an operation appeared absolutely indispensable. Now, on the contrary, post-operative accidents have disappeared. Trusting to this impunity, the surgeon has a great tendency to intervene as soon as an operation appears practicable. The older surgeons hesitated a good deal to operate, owing to the occurrence of consecutive accidents, they consequently carefully examined the parts affected, the general state of the patient, his temperament, and his antecedents; in a word, the surgeon sought to make a rigorous diagnosis. Then the utility of the operation was discussed at some length, the question, if the chances of cure were equivalent to the gravity of the disease, was carefully weighed. Now, all these considerations have become secondary, and often the diagnosis is effected by the operation. When it concerns a tumor, the surgeon scarcely occupies himself as to its nature. The tumor is removed, and it is afterward examined at leisure. In cases of an affection of the abdomen, the surgeons of to-day do not make those brilliant and delicate diagnoses made in former times. The abdomen is opened, the surgeon looks into it, and if there is nothing to be removed, he closes it. The same remarks may be applied to prognosis. The question whether the patient could be cured by other means was scarcely discussed, nor whether the benefits of the operation were sufficient to justify it. It is thus that the surgeon practiced on the face the most terrible operations for cancers of the tongue, pharynx, etc., and the patient succumbed with or without relapse, a few weeks after, without obtaining the least profit by the intervention. The ablations of the thyroid gland in goitrous subjects may seem very fine as operations, but afterward the patients become affected with cachexia. In the midst of the hecatomb of Fallopian tubes and ovaries which some surgeons give themselves to, it is not considered whether a certain number of patients could be cured by other means. In depriving a patient of the reproductive faculty we give rise to troubles more or less serious in the patient's physical and moral condition. In all operations, even when practiced under the strictest rules of antisepsy, there is still one danger to be considered, and that is the least negligence in the application of this method suffices to compromise all. A catgut of bad quality, a solution very weak, a sponge badly prepared, might destroy one's assurance. He concluded by observing that in this surgical revolution, as well as in all others, there is good and bad, and he recommended that while the antiseptic method should be religiously observed, clinical observation should never be neglected."

MEDICAL ITEMS.

The Woman's Medical College of New York, expects to move into a new and commodious building the coming fall.

Dr. Jno. B. Keber has been elected Professor of Skin Diseases and Syphilis, by the faculty of the Beaumont Medical College.

A Curious Delusion.—A Birmingham man, while under the influence of drink, knocked off his great toe with a hammer, imagining that he was cutting his throat with a carving knife.

Music and Meat.—It is said that Adelina Patti habitually uses large quantities of a preparation of beef, believing that it tends to preserve her voice and quiet her nerves when overstrung.

The "Elixir" Again.—Paris gossips declare that one of the physicians who was most conspicuous in ridiculing Dr. Brown-Sequard's "elixir" has just been cured of paralysis by its administration, and is now as zealous an advocate of Sequard as he was previously a scoffer.

The Origin of the Druses.—An English rector, who has been living among the Druses and won their confidence, states that from their knowledge of Freemasonry he believes this people to be descendants of the Phœnicians, who aided Solomon in building his temple.

Oophorectomy in New Holland.—The natives of New Holland perform oophorectomy upon girls, to provide a class of prostitutes who will not unnecessarily increase the population; and in case of any natural defect, such as mutism, which they do not desire to transmit to posterity.

The Betel Nut in India.—The areca or betel nut is eaten by 100,000 persons every day in India, according to a paper read before the Anthropological Society of Bombay by Dr. Dymock. The fresh nut has intoxicating properties, and the fruit of some of the trees retains this quality when it is dry.

Cooking Eggs.—How many women know how to prepare a perfectly fresh egg so that an afflicted stomach can eat it? Pour boiling water over the egg (in its shell), let it stand on the tank in the water for five minutes. The egg will be nearly as smooth as custard, and is almost as easily digested as a raw one, while its flavor is something delicious.—*The Nightingale.*

A Young Smoker.—There is a child in Trenton, N. J., æt. 4 years, who has smoked tobacco since he was 7 months of age. He is quoted as a remarkable instance

of hereditary taint, and was weaned early by the proud mother in order that he might give full bent to his taste. A little daily counter-irritation in the shape of spanking might turn the thoughts of this youthful monster in another and better direction.—*Med. Record.*

Italian Students in Germany.—Each year the number of Italian students attending the German Universities is increasing. In 1885, the number was 189; in 1886, 224; in 1887, 310; in 1888, 390; and in 1889, 535. Italy, so long the center of culture and of refinement, is again fast advancing to a foremost position in the medical world, and the glories that were historic give promise in their renewal of still greater achievement in the days to come.

Belgian Quacks Imprisoned.—In Nievelles, Belgium, two quacks, named Vaudevoir and Detret, have been sentenced to six months' imprisonment. Vaude voir prescribed for patients and made diagnoses while simulating hypnotic sleep. It was not necessary for patients to come in person, as equally good results were obtained if a piece of soiled linen that had been worn next to the person was sent. By this method a patient suffering from an anal fistula was treated for a bronchial catarrh. Dr. Garlier, a physician associated with these swindlers, will soon be brought to trial.

A Precocious Boy.—It is reported that an extraordinary child was recently found by a correspondent of the *Lancet* in West Cornwall, Great Britain. He is now 5 years and 6 months old, and is of the following dimensions: Height, four feet; weight, 117 pounds; circumference of abdomen, 42½ inches; waist, 37½ inches; chest, 37 inches; neck, 14 inches; head, 22½ inches; thigh, 23 inches; calf, 15½ inches; arm, 11¼ inches; forearm 16½ inches. He is very healthy, eats all day long, if he can get it, and is fairly intelligent. The parents and their other children are of ordinary size.—*Med. and Surg. Rep.*

Thyroid Grafting in Myxœdema.—Mr. Victor Horsley has shown that it is possible to graft the thyroid on the peritoneum in some animals. Acting upon his suggestion M. Lannelongue has performed thyroid grafting on a little girl with myxœdema, for whom nothing better could be expected than a chronic cretinoid condition. A thyroid gland was taken from a young sheep, and two thirds of it grafted on the child's thorax just below the right breast. The operation presented no difficulty, and when Lannelongue reported the case to the Societe de Biologie, the graft had taken firm hold and was doing well.—*Practitioner*

Lister as the Genius of Surgery.—The new Policlinic in Rome will have its two facades adorned with bas-reliefs in illustration of the modern genius of medicine: John Baptist Morgagni, representing pathological research, and Sir Joseph Lister surgical treatment. Designs for the bas-reliefs in question have been sent in by twenty-one competing sculptors, and are this week on view in the Scuola Vittorino da Feltre, in the Via della Polveriara. The number of designs is thirty six, several artists having submitted more than one to the "Comitato Aggiudicatrice." The committee, which is composed of an equal representation of fine art and medicine, under the presidency of Dr. Guido Baccelli, has no easy task before it, as the competitors include the acknowledged masters of sculpture in Italy.—*The Lancet.*

A Good Deal in a Glass of Lager.—A writer in a German newspaper has had the temerity to jot down the ingredients which go to make up a glass of beer in Germany. The pharmacopœia of the beer barrel this scientific man sets forth in alphabetical order. We give the German nomenclature for fear of spoiling the brew. It consists, says the writer, of alcohol, althopfenol, aloe, belladonna, biercouleur, bilsenkraut, bitterklee, buchenspane, caraghenmoos, coloquinten, enzian, fichtennadelh, gogel, gelatine, glycerine, hazelnuszspane, housenblase, herbstzeitlose, hopfenaroma, hopfenbittersaure, Ignatiusbohne, ingwer, kamille, kartoffelzucker, kardobenedictenkraut, kokelskorner, koriander lakritzensaft, laugensalze, malzetrat, metallsalze, mohn, moussirpulver, notron, nieszwurz, nuz vomica (brechnusz), pikrinsaure, pottasche, quassia, reis salicylsaure, schafgarbe, Spainscher, pfeffer, soda, starkezcuker, starkemehl, strychin, syrup, tannin, tausendguldenkraut, tischlerleim, wachholder, waldmeister, weidenschalen, wermuth, zuckercouleour, etc. This is why we *pass* on lager.—*Phar. Record.*

German Medical Diplomas.—In the numerous small free faculties of Germany the medical students pass their examinations in the following manner:

"Do you smoke?" asks the examiner.

"Yes, sir," answers the student. "Will you have a cigar?" (*Hands the professor a pfenning cabbage leaf cigar.*)

"Tell me," says the professor (*slowly lighting his weed*), "what are a physician's principal duties.

"To collect his fees, increase his practice, and exhibit his diploma from the time honored University of Guzzleburg," replies the student.

"Where shall you practice?" demands the professor, "and what are your duties toward me?"

"I shall go to America, among the ignorant natives, and make a golden harvest. And my duty toward you, Herr Professor, is to invite you to dinner for the rest of the semester," answers the student.

The professor smiles and says: "You are right. Let us go to a restaurant opposite and I will sign your diploma. The diplomas of the time-honored University of Guzzleburg are admired and respected in America. I have a cousin who is a doctor in Chicago. Let me tell you how the Indians chased him on Prairie Avenue. He was wounded twice by their arrows, and captured, but was released by his pursuers when they found on his per-

son the time honored diploma of the University of Guzzleburg. Ah! here's the restaurant, and I will make out your diploma from the time-honored University of Guzzleburg."—*Cincinnati Lancet-Clinic.*

BOOKS AND PHAMPHLETS RECEIVED.

Transactions of the Southern Surgical and Gynæcological Association, Vol. II. Second Session, held at Nashville, Tenn., Nov. 12–14, 1889.

Dosimetry in Colorado. By Dr. J. E. MacNeil, Denver, Col.

Gunshot Wounds of the Abdomen. By Aug. Schachner, M.D., of Louisville, Ky. Reprint from "Annals of Surgery."

Wood's Medical Surgical Monographs, Vol. VII., No. I, July1890, containing:

I. Stricture of the Rectum. By Charles B. Kelsey, M.D.

II. Influence of Heredity on Alcoholism. By Dr. Paul Sollier, Paris.

III. Rabies. By Louis Pasteur, Paris.

IV. Colotomy. By Thos. Bryant, F.R.C.S.

V. Massage of the Abdomen. By Dr. Reubens Hirschberg.

The Therapeutical Applications of Peroxide of Hydrogen (Medicinal) and Glycozone. By Chas. Marchand, Chemist. New York, 1890.

A Case of Large Cerebellar and Several Smaller Cerebral Hæmorrhages. By Theodore Diller, M.D., Assistant Physician in the State Hospital for the Insane, at Danville, Pa. Reprint from the "Med. and Surg. Rep."

Circular Insanity; A Contribution to the Study of the Affection. Report of a Case. By the Same. Reprint from "Alienist and Neurologist."

Sixteenth Annual Announcement and Catalogue of the Medical Department, University of Tennessee, Nashville Medical College.

Supra-Vaginal Hysterectomy, Hysteromyomectomy with Suspension of the Stump in the Lower Angle of the Abdominal Incison. By Howard A. Kelly, M.D., Baltimore, Md.

A Case of Multiple Neuritis. By Robert Funkhouser, A.M., M.D., S.S.B., of St. Louis. Reprint from "Alienist and Neurologist.

Hypnotism. By the same. Reprint from the "Alienist and Neurologist."

The Use of Powdered Jequirity in Certain Affections of the Eye. By W. Cheatham, M.D., Louisville, Ky.

Thirtieth Annual Announcement of the Bellevue Hospital Medical College, 1890–91.

Report of the Intercollegiate Committee of the American Institute of Homœopathy, June, 1890.

A Story: Damon and Pythias. A Souvenir to the Knights of Pythias of the World. By Pabst Brewing Co., Milwaukee, Wis.

Practical Sanitary and Economic Cooking, Adapted to Persons of Moderate and Small Means. By Mrs. Mary Hinman Abel. The Lamb Prize Essay. Published by the American Public Health Association, 1890.

Preliminary Announcement of the Eighteenth Annual Meeting of the American Public Health Association, to be held at Charleston, S. C., Dec. 16–19, 1890.

A Case of Paranoia, Illustrating the Feature of Imperative Conceptions. By Theodore Diller, M.D., St. Louis, formerly Resident Physician, Philadelphia Hospital, etc.

Chorea in the Adult as Seen Among the Insane. By the Same. "Alienist and Neurologist."

Some Observations on the Hereditary Forms of Chorea, with the Report of a Case. By the same. Reprint from "Am. Jour. Med. Sc."

Two Cases of Resection of the Cæcum for Carcinoma. With Remarks on Intestinal Anostomosis in the Ileo-Cæcal Region. By N. Senn, M.D., Milwaukee, Wis. Reprinted from "Jour. Am. Med. Ass'n."

Recollections of General Grant: With an account of the Presentation of the Portraits of Generals Grant, Sherman, and Sheridan at the U. S. Military Academy, West Point. By George W. Childs.

Apparatus for the Preparation of Bone Specimens, and for Arterial and other Injections. By Otis K. Newell, M.D,, Surgeon to Out Patients, Mass. General Hospital. Reprinted from "Boston Med. and Surg. Jour."

Electrolysis in the Treatment of Stricture of the Rectum. By Robert Newman, M.D. Reprinted from "Jour. of Am. Med. Ass'n."

Menstruation and the removal of Both Ovaries. Geo. J. Engelmann, A.M., M D., St. Louis. Reprinted from Trans. of Southern Surg. and Gyn. Ass'n.

Climatology and Diseases of Southern California. By F. D. Bullard, A.M., M.D. Reprinted from Southern Cal. Prac.

Stricture of the Rectum; Intestinal Obstruction; Inguinal Calotomy. By Chas B. Kelsey, MD.., Prof. of Diseases of the Rectum.

Uric Acid Diathesis in affections of the Eye, Ear, Throat and Nose. By W. Cheatham, M.D., Louisville, Ky. Reprinted from Am. Practitioner and News.

Infusion of Salt Solution and Transfusion of Blood in Acute Anæmia. Their Relative Value. By Prof J. Mikulicy, of Krakau. Translated by Otis K. Newell, M.D.

New Methods of Pylorectomy, with Remarks on Intestinal Anastomotic Operations. By A. V. L. Brokaw, M.D., St. Louis.

Intestinal Anastomotic Operations with Segmented Rubber Rings, with some Practical Suggestions as to their Use in other Surgical operations. By the same. Reprinted from Trans. of Southern Surgical and Gynæcological Association.

Abstract of Proceedings of the Michigan State Board of Health, meeting April 15, 1890.

Tenth Annual Announcement and Catalogue of University Medical College of Kansas City, Mo.

Annual Report of the State Board of Health of Missouri, for 1888. Geo Homan. M.D., Secretary.

How to Examine for Life Insurance. By John M. Keating, M.D., President of the Association of Life Insurance Medical Directors, etc. P. Blakiston, Son & Co., 1012 Walnut St., Philadelphia, 1890.

Money. Speech of Hon. John P. Jones, of Nevada, on the Free Coinage of Silver; in the United States Senate.

Fifteenth Annual Announcement and Catalogue of Meharry Medical Department, Central Tennessee College, Nashville, Tenn., 1889 90.

CORRESPONDENCE.

NEW YORK LETTER.

New York Hospitals—Abused Charity—Sim's Amphitheatre — College of Physicians and Surgeons—Presbyterian Hospital —Mt. Sinai Hospital—International Galore—Intubation —Amalgam Fillings.

New York, N. Y., July 25, 1890.

Editor Review:—"Why don't you move west," said I to a poor, but intelligent, dispensary patient, at the Vanderbilt Clinic, who was bemoaning the difficulty of obtaining work. "Move west," said he, "why, who would take care of me and mine when we are sick? New York is the only place in the world where hospitals are ample and numerous enough to accommodate the poor citizens who are stricken with disease."

He was not far from the truth, for New York is a city of hospitals. I have never seen any statistics, yet I am satisfied that every day there are in the various hospitals in this city no less than 5,000 patients, or one out of every 300 inhabitants of the city. Add to this the number of patients treated in the dispensaries of the city and at once the number becomes legion. As an example, the Vanderbilt Clinic might be given. Every day from 400 to 500 patients are treated. In the Throat and Nose Department alone, 5,000 different patients have been treated since its opening two years ago.

Of course such an excess of charity, entailed by the liberality and philanthropy of New York citizens, is abused, and complaints on the part of the practicing physicians are daily heard. No remedy has yet been urged, and, notwithstanding the fact that all recognize that so much prodigality, even in charity, is ill-advised, the dispensaries go on treating their thousands, nay, their tens of thousands.

The building of Sim's Amphitheatre of the Roosevelt Hospital, which, on account of a contest over the will, was delayed, will be resumed, the contestant, a sister of Mr. Sim, having withdrawn her suit. It is proposed to expend $250,000 upon the building, and to retain the $100,000 as a sort of sinking fund for the purpose of keeping the building in repair and of paying the expenses of conducting it. The students of the College of Physicians and Surgeons will be especially benefited by this institution.

Apropos to this, one may be safe in saying that the College of Physicians and Surgeons will never have as large a class as it has had, although the standard will be even higher than it has been. This is due to the qualifications which have been made requisite, viz.: the knowledge of Latin and various other branches, and also to the three years of ten months each, course of study, and $200 per year which it costs.

The Presbyterian Hospital, which suffered from a serious fire last winter, is rapidly being rebuilt, and bids fair to be the handsomest hospital in the city. Its capacity will be increased from 150 to 350 beds.

The Mt. Sinai Hospital has recently opened its new building, which is used as a Nurse's Home for the Training School and for the Dispensary. It is a handsome seven-story structure, with ample accommodations and appointments.

In New York the progress of medicine is at a standstill in the summer; especially is this true in regard to the present summer.

Everybody whose pride has been tickled by the touch of fame and who believes himself a coming man has availed himself of the opportunity and has gone to attend the International. Medical news is therefore at a discount, and the practitioners, who are less fortunate than their able brethren, but who, perhaps, have just as much ability, live through the dull routine and eagerly await the return of those whose going was so auspiciously covered with eclat, and whose coming will be the signal for new discussions, all embellished with "When I was in Europe," etc.

For the last two years intubation has been *au fait* in New York, and it is, I think, rapidly displacing tracheotomy for the relief of diphtheritic laryngitis. Its use has been further extended. Only recently, I think last May, Dr. W. K. Simpson, Surgeon, Throat Department of the Presbyterian Hospital and of the Vanderbilt Clinic, read a paper upon "Intubation in the Adult for Henosis of the Larynx," in which he describes four cases upon which he operated, three successfully and one death. In every case the relief was marked at once, and in the three cases complete cure resulted, although the stenosis was very marked. Understand,

these cases were not intubated until death seemed imminent from suffocation.

The "fellers" on the other side of the ocean have not understood or appreciated the good effects of intubation, but, I imagine that they will do so after the present meeting of the International Medical Congress, for Professor Lefferts will entertain them with a paper upon "Syphilis of the Larynx," with especial reference to intubation as a remedial agent, and Dr. O'Dwyer will describe his operation.

At the last meeting of the New York Dental Association, Dr. J. Marion Edmunds read a paper showing the evils of amalgam filling and the tendency it has of producing destruction of the tooth and the formation of abscess. He maintains, and it certainly seems plausible, that the mercury of amalgam becomes gradually changed into a soluble salt, which, being absorbed, produces much mischief. That the tubuli of the tooth take up the mercury, he says, is evidenced by the discoloration of all the teeth filled by amalgam and by the fact that mercury can be extracted in the form of globules from a tooth so filled. This is of much interest to the doctor as well as the dentist. H. W. Loeb.

SOCIETY PROCEEDINGS.

TRANSACTIONS OF THE GYNÆCOLOGICAL SOCIETY OF CHICAGO.

Regular meeting, March 21, 1890, the president, James H. Etheridge, in the Chair.

Exhibition of Specimen.

Dr. F. H. Martin.—Mr. President: The specimen that I wish to put on record is one of carcinoma of the cervix and a portion of the body of the uterus. The patient was 45 years old, a Swede, married 14 years, one child; had not yet reached the menopause. History: Had been flowing quite profusely for five years every two weeks. Assisted by Drs. Byford and Hoag, vaginal hysterectomy was performed. Clamp forceps were used to secure the broad ligaments after the base of the broad ligament on either side had been tied with strong silk. The forceps were removed at the end of seventy-eight hours; the ligatures came away about the eleventh day. The patient was discharged cured January 26, one month after the operation. There was considerable pain in the right side, and I was a little afraid that infiltration might have taken place to some extent, and for that reason the forceps were placed as far away from the uterus as possible on that side. We removed the uterus with the tube and ovary of the right side.

Dr. Parkes.—Why did you leave the forceps on so long as seventy-eight hours?

Dr. Martin.—The case was very hæmorrhagic, and I had been reading of late of a number of cases of hæmorrhage following the use of forceps, and in these cases almost invariably the forceps had been removed very early, within twelve or twenty-four hours. I really could see no reason why they should be removed earlier than seventy-eight hours, and for that reason I allowed them to remain, so as to avoid every chance of secondary bleeding.

Dr. Henry T. Byford.—I witnessed the operation and would like to call your attention to one point, *i. e.*, the facility experienced in removing the uterus in this particular way, viz., in tying the uterine artery and tissues around it first, and then using a pair of forceps above. There are thus no forceps in the way to interfere, and we can do the operation really quicker and better than if we used the forceps alone. I have operated in this way in five cases, all recovering. In a case in which I removed the forceps in twenty-four hours I came near losing my patient from hæmorrhage. Fortunately I was able to tampon so as to check the hæmorrhage.

Dr. D. T. Nelson.—The Society may remember that some months ago I exhibited an Outerbridge pessary for anteflexion, sterility, etc., and reported then that in my experience it would corrode, and thus prove unsatisfactory and even dangerous. I have here three instruments. The one which has no tag upon it was worn one month, and you will see that it is corroded. The others were worn two months and three and a half months; this latter one has one arm completely destroyed. They are iron wire plated with gold, but the gold plating is not sufficient to hold the iron underneath. They will corrode.

Report of Clinical Laparotomies During Eighteen Months at Rush Medical College.

Dr. Chas. T. Parkes.—I found considerable difficulty arranging in my mind the title of the remarks I wish to make to-night, and I do not know that the heading expresses exactly the idea. The method of operating is something of an innovation, in that the laparotomies are done in the public clinic room before several hundred students. The cases are presented under the supposition that their cure and results might be of interest to you, so I have gotten together the cases that have come under my control during the past two winter sessions, covering a period of about eighteen months, operated upon by me at the public clinic of Rush Medical College. [Detailed report omitted.]

This presents to you a series of 30 cases. Of these, 15 were ovarian, and out of the 15 but 1 death. In this series there were 2 extra-uterine pregnancies, 3 pyosalpinx, all recoveries; 1 cyst of the pancreas, 1 recovery; 2 troubles of the kidney—1 complete removal of the kidney, the other partial removal—both recoveries; 2 troubles of the uterus, 1 cancer with perfect recovery, 1 large myoma with death; 3 cases of carcinoma, 1 of the stomach, 2 of the liver and other organs—1 (of the stomach) death; 2 (of the liver and other organs), 1 recovery and 1 death; appendicitis, 1 case, 1 recovery; tuberculosis of the peritoneum, 1 case, 1 recovery.

As you look over this list, you will see that I am not

doing myself justice in putting on it two cases of attempt to remove well-marked cancer of the liver and stomach; they might possibly be left out, but I am well satisfied to leave it as it is. Thirty cases with twenty-six recoveries and four deaths is a record that I do not think can be exceeded anywhere. I am inclined to think it is an innovation, so far as this country is concerned, doing these operations before a large class.

I think I have had the hardihood before to remark, for which I was reproved, that, so far as ovarian tumors are concerned, the removal of a simple ovarian tumor is about the simplest operation a surgeon can do. But what I wish to call attention to principally is the fact that in different cities a great proportion of the large amounts of money that are given for hospital purposes have been expended in putting up special rooms for laparotomies, with all inside walls and ceilings of marble, and so arranged that it is impossible for microbes to get in or out. In some places the patient is as absolutely isolated as a case of small-pox. Physicians who see the case are let in in small squads, a few at a time, into these specially prepared rooms, and this is done under the impression that something outside the surroundings of the patient must be done in order that the success of the operation shall be brought up to the standard the profession believes in. But I contend all of that is useless. I do not believe any patient's life was ever saved by marble walls or tesselated pavements. My own belief, which I put in force so far as these thirty were concerned—cases that were taken without selection, cases that represented the moderately difficult and the severely difficult—is that it is what is put into the abdomen, the preparation of the operator and his assistants, of everything that touches the case about the wound, from which safety comes.

Dr. Nelson.—I am very glad such a record has been made in this country, and I believe we can demonstrate eventually that microbes, while they may be carried, do not have wings, and are not likely to be blown about in our operating rooms. If we, our instruments, our ligatures, our assistants, do not carry them, I believe, with the reporter of these remarkable cases, we are not likely to get them into the patient. I do believe that there is something in the patients, that is, in their condition of health and strength and vigor, as to susceptibility to influence from the microbes or germs. Whatever may be the exciting cause of the disease, many patients in good strength and vigor will destroy, take up, or make away with—if you please—many of these germs, whereas those who are not strong and vigorous will not and cannot do it. Although it will make perhaps but little difference in a series of cases of this sort, where good, bad and indifferent have to be taken, yet the condition of the patient at the time of operation is frequently an important factor, I think, in recovery, as well as the utmost care bestowed. I am certainly exceedingly pleased to find such a demonstration as this of the possibility of operating where only care of the patient and those immediately touching the patient is especially recognized, and not so much is thought about the atmosphere around or in apartments at a distance from the patient.

Dr. Byford.—I have the satisfaction of knowing that while Dr. Parks was operating in this way I was doing the same. Thinking to surprise him, I one day spoke to him about my work, and found out to my surprise what he was doing.

I commenced in the winter of 1888 to perform peritoneal sections before the class of medical students in the amphitheatre of St. Luke's Hospital. On the first Wednesday in January, 1888, I gave my first clinic at St. Luke's Hospital, removing diseased uterine appendages. At my second clinic, a week later, I removed an ovarian tumor containing three pints of fluid. A few weeks later I removed an ovary by vaginal section at the clinic. The next winter I opened the abdomen twice before the class. Up to that time I had selected my cases, for I was told that if I had a death I might be blamed for reckless operating. During the past winter session I operated upon every available case, opening the abdomen six times before the class. As I give only twelve clinical lectures each winter, this was as many cases as I could get in without excluding too much other material more important to the medical student. All these cases recovered without a sign of sepsis or other bad symptom attributable to the method of opering. I found no difference in the result from my private cases. I could add many more if I included operatious before classes of six or eight from the Post-Graduate Medical School, but I am now referring to those cases where medical students came without preparation, as to other clinics.

As test cases I may mention the following: In the case of ovariotomy above mentioned the abdominal fat was five inches thick; the patient was insane, had cystitis, and escaped from her room four days after the operation and went to the bath room. She recovered without a bad symptom except restlessness.

In another case, in attempting to drain an abscess under the abdominal walls, the whole thing parted from the walls and opened into the abdominal cavity. I did not in the least expect to have a laparotomy, and had no preparation for one. Our hands, sponges, and instruments had been bathed in pus. I washed out the cavity and used drainage above and also into the vagina, and packed the pus surfaces with iodoform gauze. The patient got well. The temperature went up to 101°F. the next day, but it came down in a few hours, and she got along as well as though there had been no pus to deal with. In a case of pyosalpinx I had the abdominal cavity open nearly two hours. An abscess of the ovary had over a year before opened out through the vagina, and when that contracted it brought the uterus, broad ligament, and suppurating tube back over it. The omentum and intestines, adherent over that, formed an almost impassable barrier to the pelvis. After enucleating the asbcesses I spent some little time trying to check the hæmorrhage, which threatened to destroy the feeble patient. I finally tamponed the pelvis with iodoform gauze, and left the tampon there. She had no sepsis or other unfavorable symptom.

To my mind these cases show that there is a possibility, if we work carefully, of doing these operations before students, and giving them the benefit of some training in abdominal section. I know of no kind of surgery in which it is as necessary for a man to have clinical experience before doing operations as in abdominal surgery.

I agree with the doctor fully, except perhaps on one point. That is about ovarian tumors. There is nothing easier to remove than a simple ovarian cyst, but I do not think I have met with more than three simple ovarian cysts in a year, although I have removed quite a number. Suppuration, development under the broad ligament, rectum, or colon, extensive adhesions, malig nant character, etc., render ovariotomy one of the most formidable of operations. When the absurd notion shall have died out of the professional mind that it is better to wait until an ovarian tumor interferes with the comfort of the patient before removing it, then ovariotomy will more often mean simple ovariotomy, and the death-rate will at last be so small as to frighten no one.

Dr. Lee.—Mr. President: It seems this method of doing laparotomy is almost co-extensive. I have been in a number of places where I have seen laparotomy performed before large classes, and in as ill-ventilated and ill-prepared amphitheatres as could well be found. In the Post-Graduate Medical School in New York, which has hardly any of the modern ideas carried out in it, which has hardly any appliances for such operations, I saw laparotomy performed, in December, in the presence of probably twenty-five students; and if the number had been larger it would have been all the same, as I was informed it was the custom to make operations before such classes as should present themselves in the amphitheatre.

Dr. Martin.—Mr. President: It is interesting to know the methods of those operating in amphitheatres before large classes. I think it would also be interesting to know the methods employed for preparing the assistants, instruments, nurses, and the preparatory treatment of patients. I think that all operators have different forms that are gone through with, and it would certainly be very interesting to know Dr. Parkes' method for preparing those who take part in an operation.

I would like to speak in regard to the method of securing the broad ligament in vaginal hysterectomy. I think it will be noticed in the reports of cases at present that while the broad ligament forceps is used pretty generally, the majority of operators prefer to ligate the base of the broad ligament with strong silk—possibly not only with one ligature but two or three, if easily reached—and cutting that portion away so that the broad-ligament clamp will have a very much smaller portion to secure; it being a fact that the broad-ligament clamp, even the strongest, will not secure all portions of the ligament with equal pressure. Some portions are liable to draw out and bleed. A number of such cases are on record.

I think the point mentioned by the President is well taken. In fact, it would have saved me a similar difficulty if in a recent case I had looked much more carefully after securing the arteries that are liable to be severed when the vaginal section is made. In this case, before the patient was put to bed all hæmorrhage was secured, so far as the broad ligament was concerned; but I was called up in the middle of the night, the house doctor stating that secondary hæmorrhage had taken place. Putting the patient on the table, I found the hæmorrhage had been entirely from an artery in the corner of the vagina. The patient was pulseless, but with stimulation revived, and subsequently recovered.

Dr. T. J. Watkins.—I think the report of these very interesting cases of Prof. Parkes, shows that the good results of laparotomy depend much more upon the cleanliness of the patient, the instruments, the operator and his assistants, than upon the so-called "aseptic" conditions of the air of the operating room.

As long ago as 1883 Dr Donald McLean did laparotomies before the students at the University of Michigan in the hospital amphitheatre. The students were permitted to go directly, without changing their clothing, from the dissecting to the operating room; yet in no one of his cases so operated did any evidence of air infection develop.

Dr. Bayard Holmes.—Mr President: There are only two methods by which infection of any wound may take place: one is called air infection, the other contact infection. The danger from air infection has been proved by all investigators to be comparatively slight, while the real danger lies almost entirely in contact infection. Upon some plates that I exposed for twenty-four hours at one time in a closed room of the fifth story of a building in the centre of this city, twelve colonies developed to each square inch, and probably not one in fifty was of pyogenic bacteria. In the bacteriological laboratory we are accustomed to open gelatin tubes and other nutrition material for several minutes without the least expectation of any infection of the nutrient material. Plates of gelatin three or four inches square were exposed sometimes for five minutes, and only rarely does one become infected with any form of growth, not to mention pathogenic growth; so the danger from air infection is, you may say, almost nothing. The danger from contact infection is greater, and yet it is not as great as we have been led to suppose.

There is one other element in this case which would not apply to other cases. The dangers which we fear in opening the peritoneal cavity are due to the infection with facultative parasites; that is to say, the infection with parasites that ordinarily live a saprophytic existence, but are able to take on a parasitic existence when in a favorable locality. The human body exists to day because it has developed a resistance to that form of infection in all those localities where it is most exposed to it. The skin and the mucous membrane are adequate protection aganist the facultative

parasites. Now, the serous cavities also have some resistance and that resistance is greatest where the danger of infection is greatest. Through the intestines, only a line away from the peritoneum, there is a mass of material full of these facultative parasites, and the peritoneum is very apt to be infected through the lymphatics from the contents of the bowel, hence the peritoneum has a very great resistance to infection of this kind; but that resistance is not found in the serous cavities which surround the lungs, the heart, and the larger joints, and I predict that without the use of antiseptic solutions no such series of thirty cases could be found where the pleural cavity, where the meningeal cavity, or where the large joints were opened.

There is one other point that is worthy of consideration by every operator, and that is the fact that it is an antiseptic precaution to make as small a hole in the abdomen as possible, to keep it open as short a time as possible, and to use as few instruments as possible; and I look upon the success of Dr. Parkes in an open, dirty amphitheatre, with every source of contamination from the air, as due to the care which he bestows upon his instruments and sponges, and the fact that he operates rapidly, and that he uses his hands, and does not depend upon fifteen or twenty instruments and many assistants to do what his fingers will do as well alone.

[TO BE CONCLUDED.]

SELECTIONS.

SODIUM SALICYLATE IN THE TREATMENT OF CHOREA.

In an article in the *Bulletin General de Therapeutique*, No. 16, 1890, Dr. Dresch speaks very favorably of the action of salicylate of sodium in cases of chorea. The disease, he says, is of greater gravity than is generally supposed, for it not infrequently causes death either directly or indirectly. The importance, therefore, of an intelligent and active therapy is manifest. He believes that chorea is a microbial disease, the micro organism of which is probably of the same family as that of rheumatism. The choreic movements are to be regarded as reflexes provoked by the presence in the tissues of the specific microbe, and are similar to the cough of pertussis, the spasms of tetanus, the premonitory chill of certain fevers, etc. Having these views as to the nature of the disease, he adapts his therapeutic measures to them, as far as it is possible to do so, although he admits freely the inefficiency of salicylic acid as a microbicide. The treatment should be begun at the earliest possible moment, and should be energetic, whether the beginning of the disease be severe or mild. The drug is not given as a germicide or as anti-rheumatic, but rather because of its action upon the medulla and cord, where it affects the motor centres as well as the sensory, thus restraining the movements of chorea as well as the pain of rheumatism. It is probable also that it would act equally well in diminishing the severity of the paroxysm in whooping-cough, though the author has never tried it in that affection. It is to this sedative effect of the drug that he attributes the fact that he has never seen any excessively severe cases since beginning its use, and has not been obliged to have recourse to any of those agents which calm the paroxysms only by stupefying the patient. But another great advantage possessed by the salicylate is that it increases the elimination of waste products, being, like benzoic acid and its derivatives, a solvent; in other words, it opens the kidneys instead of closing them as do quinine and antipyrine, which are so often given in chorea. It is evident that the choreic movements must greatly augment the amount of waste products, both muscular and nervous, thrown into the circulation, which products are toxic and of themselves excite convulsions. It is of the utmost importance, therefore, that any remedy given for the disease should favor the elimination of these materials by the kidneys and other emunctories. Dr. Dresch has found the salicylate well borne in most cases, a child of twelve years taking without trouble as much as sixty grains in the twenty-four hours, the only precaution being to give the drug in small and repeated doses, well diluted with slightly alkaline water. It is not usually necessary to continue the use of the remedy more than eight or ten days. During the first period of the disease the patient should be kept in bed in a well ventilated room at an even temperature, and noise should be avoided as far as possible. A milk diet is the best if it is acceptable to the patient, but beef tea is not to be recommended. An enema of tepid water once a day is useful, but should not be insisted upon if the patient objects strenuously. Nothing, indeed, should be done that is liable to excite the child. As the disease begins to subside the treatment should keep pace with it, the child being allowed to get up and gradually resume his usual diet and amuse himself in his accustomed way. The author objects decidedly to sea-baths.—*Med. Record.*

FŒTOR OF THE BREATH AS A SYMPTOM IN THE AFFECTIONS OF INFANCY AND CHILDHOOD.

BY LOUIS STARR, M.D.

The breath of a healthy infant or child should be odorless, or, as the nurse will say, "sweet" except, perhaps, immediately after taking nourishment, when it may, for a short time, have the smell of milk or any special food eaten. The persistent presence of an odor, therefore, is abnormal, and indicates diseases.

Any morbid condition of the system that prevents the elimination of metamorphosed nitrogenous tissue through the mucous membrane of the intestines, or retards the passage of decomposing detritus along the

bowels, will cause an offensive breath. Under this head come conditions characterized by high temperature, catarrhal inflammations of the gastro-intestinal tract, chronic debilitating diseases, etc. The same result, also, frequently attends structural lesions of the kidneys. The reason for this is, that the system, in order to get rid of poisonous matter—for accumulated waste is poison—and to maintain the balance between the constant construction and destruction of tissue, must throw off what the intestinal glands and the kidneys fail to excrete; so the lungs take on vicarious activity and the expired air becomes tainted with the products of waste. Very often, by the way, the skin takes a share in the abnormal excretory process and a similar odor is noticed in the perspiration.

Purely local causes of *halitosis* also exist. These are decayed teeth, caries of the nasal and maxillary bones, ulceration of the mucous membrane of the mouth, nose, larynx, trachea and bronchial tubes, and gangrene of the cheek. Chronic poisoning by lead, arsenic and mercury, though not very common in childhood, is another cause of ill-smelling breath. To speak in general terms, the breath may become sour, catarrhal, fœtid, gangrenous, ammoniacal and stercoraceous. This classification is a rude one, and many subdivisions can be made of some of the odors. Thus, there are many varieties of catarrhal and fœtid breaths, which, while more or less distinctive of different conditions, cannot be differentiated in words and must be experienced by the observer's sense of smell to be recognized; once this is done they become valuable symptoms. Sour breath is present in infants more especially when there is gastric fermentation. The variety of blood, whether milk or farinaceous substances, makes little difference in the odor, and it is most perceptible in cases attended by emaciation and vomiting. In chronic vomiting, chronic entero-colitis and thrush, the intensely acid odor exhaled from the mouth and, in fact from the whole body, is a most prominent feature.

What I have classed as catarrhal breath, has, as already stated, numerous shades of difference. In chronic catarrh of the pharynx there is always a "heavy breath," not noticeable far from the patient's face. The odor is always more marked during sleep, and is greatest after the long sleep of night, as then the mucus, to which the odor is due, not being removed by acts of swallowing, collects in larger masses.

Should the catarrh invade the follicles deeply, and especially should there be associated follicular tonsillitis, the breath, which still having the quality of heaviness, becomes extremely offensive, with a scent somewhat like that of decaying cheeses, and is very penetrating. This odor, too, is worse after sleeping.

At the onset of acute catarrh of the stomach the breath becomes decidedly tainted. Sometimes it has a vinous odor, at others it is sweetish, and I have attended a number of cases in which it had the same quality as after inhalation of ether. Later in the attack it becomes sour, or has the odor of sulphuretted hydrogen. The former is apt to be the case with older children, who have a more solid albuminoid diet.

What is known as a "feverish breath" has a heavy, sweetish smell. It is met with in diseases attended by high temperature, and depends partly upon catarrh of the gastro-intestinal mucous membrane, the common attendant of fevers, and partly upon the elimination of fever waste. It is very marked and rapid in appearance in scarlatina. In chronic intestinal catarrh with obstinate constipation the breath often has a slightly fæcal odor.

Simple catarrh of the nasal mucosa when of any standing gives rise to moderate heaviness, and the same is true of catarrh of the mucous membranes of the mouth—stomatitis; though in the latter affection, mastication and swallowing being difficult, small quantities of food collecting in the mouth and there undergoing decomposition, add an element of fœtor to the breath.

Fœtor of the breath is observed in its mildest form in such affections as aphthæ and ulcerative stomatitis. It is better developed in ozæna and necrosis of the maxillary bones, where the well-known stench of dying bony tissue is added. Decaying teeth give much the same odor, though it is less strong and penetrating. In all these conditions, however, the fœtor differs not only in degree but in kind.

Noma gives rise to a gangrenous odor, and a patient affected with this disease will fill the room in which he lies, or even a whole dwelling, with the most sickening stench. Cases of empyema, with ulceration of the lung and discharge of pus through the bronchial tubes, have an almost equally offensive breath, but here there is often a flavor of garlic combined with that usually due to tissue necrosis. Ammoniacal breath is observed only in patients suffering from uræmic poisoning.

A purely stercoraceous breath is rare, and when met with is an accompaniment of fæcal tumor or of intussusception. The metallic poisons, while giving rise to fœtor of the breath, have no individual characteristics, and it is necessary to look to the history and symptons of the individual case to determine the special poison.—*Annals Gyn. and Pæd.*

A FEW CORN CURES.

It must not be forgotten that the conditions which caused the corn in the first place will induce its return under like circumstances. Always impress the customer's mind with this fact. The use of the surgeon's knife in removing the corns is the only means of preventing the return of corns on some people's feet. But then the druggist need not worry over that, for the trade is a source of revenue if properly handled.

Probably the most popular corn cures depend on the action of salicylic acid. Among the many therapeutic properties of this comparatively new remedy is its power to disintegrate epithelial tissue. It is usually combined with Cannabis Indica. The form I have found

useful is to mix nine parts of salicylic acid with one part of extract of Cannabis Indica and forty-eight parts of collodion. This is applied to the corn every night with a camel's hair brush. The foot should be clean before it is applied and the mixture permitted to thoroughly dry before it comes in contact with clothing.

I am aware that there are several other formulas published for this same mixture, and that they usually call for less of the salicylic acid, but I believe the above amount should be used in order to get good results.

A salicylic acid corn plaster is made by melting six parts of resin and adding five parts of balsam of fir and then stirring in ten parts of salicylic acid as it cools. This can be spread on any suitable medium for a plaster. When used the corn must not be rubbed with the shoe.

Lanolin forms the basis of another salicylic acid plaster, and cocaine is added with the idea of making it painless. To form the plaster mix six drachms of salicylic acid thoroughly with ten drcahms of lanolin. Dissolve five grains of hydrochlorate of cocaine in a small quantity of warm alcohol and mix the solution with one fluid ounce of creasote. Mix one-half ounce of melted white wax with one-half ounce of vaseline and add the creasote solution. To this add the cocaine solution and mix.

Some of the salicylic acid corn cures are simply a salicylic acid cerate made by mixing one part of salicylic acid with eight parts of simple cerate.

Among the corn plasters made without the use of salicylic acid is one composed of forty parts of resin cerate, forty parts of galbanum plaster, fifteen parts of verdigris, five parts of turpentine (the oleoresin), and three parts of creasote.

There is also in the market a corn plaster which is ordinary adhesive plaster with about fifteen per cent of salicylic acid and a small percentage of benzoin.

Salicylic acid is sometimes associated with arsenic in the proportion of two drachms of the salicylic acid with one drachm of arsenious acid and one ounce of vaseline. This is used as a salve on linen.

Still another corn plaster is made of salicylic acid one part, Burgundy pitch one part, and yellow wax one part.

A caustic corn salve is made by mixing a hot saturated solution of caustic soda or potassa with twice its bulk of glycerite of starch.

A solution for the cure of corns has been made by dissolving thirty grain of tannic acid in one ounce of a mixture of equal parts of tincture of iodine, acetic acid and glycerin.

This list could be continued for some time, but the above formulas will enable the energetic druggist to satisfy his customers and aid in filling his money drawers.—H. M. Whelpley, M.D., Ph. G. in *Notes on New Remedies*.

SOME POINTS ON THE REDUCTION OF HERNIA.

Prof. J. S. Wight, M.D., in *Brooklyn Med. Jour.*, says: Grasp the hernial tumor with the right hand, and then make gentle traction; the hand compresses the hernia and its contents, and liberates the neck of the sack in the constricting canal. And then two effects may follow: Some of the contents of the sac are expressed into the abdominal cavity. This may be the contents of the intestine—the special fluid of the sac; or the intestine itself, especially if it is not adherent to the sac; or the sac and the contents may begin to be reduced. The surgeon cannot make this gentle traction without compression, and the compression tends to expel the contents of the sac, as well as the sac, when it has not formed adhesions to the tissues around it. And what is more, the gentle traction tends to straighten out that part of the hernia just external to the canal that contians the neck, and the effect of this is to remove the folds which overlap and prevent successful reduction: And then another expedient may be put in operation. The thumb and fingers of the left hand may grasp the parts of the herinal tumor just external to its exit from the abnormal opening, and this for two purposes: one, to prevent the hernial sac from folding over and, as it were, away from the hernial canal; the other, to guide the hernia more directly to the external opening of this canal. And when these purposes are accomplished, such traction as we have made may cease, and then more or less firm pressure with the right hand may be made in such a direction as to cause the hernia and its contents to move toward the opening whence it came. The hold of constricting tissues has to be loosened by gentle traction; some of the hernia may have been reduced; the folds of the sac have been removed; the thumb and fingers of the left hand guide the hernia toward its exit; the reasonably firm pressure induces more and more of the hernia to return to the abdominal cavity, and finally the reduction is complete, and the patient is relieved of pain and distress.

Generally such a result can be obtained without an anæsthetic. In a few cases the author has employed an anæsthetic, mostly in sensitive patients. In the first place he makes a reasonable effort to reduce a hernia, and then, on failure, gives an anæsthetic; and if he does not succeed then he operates. The great majority of cases of hernia which he has been called to see have been reduced without an anæsthetic, and by the method above described. Of course a real irreducible hernia requires an operation, and the sooner the better.—*Col. Med. Jour.*

PLASTER-OF-PARIS DRESSING.

"A Country Doctor" writes as follows in the *Times and Register*:

1. *Preparation.*—A common kitchen table, plenty of fine dental plaster, two dozen heavy pins or light wire nails, one light window curtain slat, a solid block three feet long(or better,a butcher's block), a sharp carpenter's hand ax, a kitchen sieve, and about ten feet of common

cheese cloth. Lay the cheese cloth folded on the table, and commence rolling the cheese cloth on the slat, while a small boy sifts the plaster carefully, but plentifully, over the cloth—roll smooth and tight.

Remove the roll to the block, and drive a pin or nail through the roll into the block, missing the slat at varying distances of 1½ to 2½ inches, holding the roll firmly. Now remove slat or not,as you please, but with one blow ofthe ax, cut in sections between pins; pack in a box with plenty of extra plaster, and keep dry. The pins should remain through the cloth to hold things firm over rough roads.

2. *Appliance.*—After cleansing the limb—and if compound, dressing the wound with powdered boracic acid—cover the whole limb with a layer of cotton batting, and hold in place with a roller. Now apply the plaster bandage, previously wet in warm water, covering the entire limb with one layer of the bandage. Now apply the bandage smoothly up and down the limb on the sides, till sufficient strength is obtained, and one additional thickness around the limb; dry with the aid of a lamp, and if the fracture is compound, cut a window over the wound, and refill with aseptic cotton and aseptic powder. After the bandage is dry, remove from the front a small strip, one-half to three-fourths of an inch, with a knife or scissors, and hold in place with a few turns of the roller. You now have a perfect-fitting, hinged splint, which can be opened for inspection, dressing, or any other purpose, and with the roller made tighter or looser as the swelling less ens or increases, etc.

After many years' experience I find this meets all conditions more nearly than any other I have tried.

1. The manner of making and cutting bandage does away with frayed edges turned in, bothersome raveled threads, and contains the greatest amount of plaster, possible.

2. Being packed in the plaster with the pins through, they are always ready and portable, hold their place, and will not lose the plaster.

3. The longitudinal layers give strength and firmness, while the thin circular layers render it easy to open, narrow, or widen.

Sound Advice for the Profession.—The following lay sermon to the profession is to be found in the preface of a curious old medical work entitled "Vade Mecum or a Companion for a Chirurgion fitted for times of peace and war, by Thomas Brugis, Doctor in Physick." London. Printed by T. H. for Thomas Williams, at the sign of the Bible, in Little Britain, 1652.

"Presume not too much on thy own wisdome and vertue, lest thou beest lifted up with a vain confidence, and puffed up with pride, for when men are carried with an inordinate and blind love of themselves, they are soon persuaded that there is nothing in them worthy to be dispised, yea, they think that their ignorance is wisdom, insomuch that knowing nothing, they suppose they know all things, and having no dexterity to performe any one commendable work, they presume very inconsiderately to set their hand to every great matter; but the more care and diligence they bestow, being let with a desire to show great skill, and thinking to win honour and renown, so much the more they discover their ignorance and blockishnesse, purchasing to themselves shame and infamy: For a man to know himself to be ignorant, is the best science and necessary for men, that without it they cannot be truly skillfull; for as I said before, the ignorant person that knoweth not himselfe to be such an one, but supposeth he knoweth that which he doth not, indeed is as unteachable as a beast can be." * * *

"Socrates, who by the oracle was declared to be the wisest man then living, was greatly commended by the ancients, because he said he knew but only one thing, viz., That he was ignorant and knew nothing.

"Now a word or two to the patient: Thou seest in every village a sort of Mountebanks, Empericks, Quacksalvers, Paracelsians (as they call themselves), Wizards, Alcumists, Poor vicars, cast apothecaries, and physitians men. Barbers and Good wives that professe great skill go with the name of Doctor, which title perhaps they bought at some beyond sea University, where they bestow this degree upon such people for their money; the phrase they use is 'Accipiamus pecuniam, demittamus asinum,' and so with title of Doctor Asse; away he flies into all countries possessing the people with stories and false tales, and leads them to the destruction of their bodies, if not of souls too, that an able Physitian or Chyrurgion, who hath undergone a great deal of hardship to benefit himself in his art can scarcely maintain himself, or know who shall be his patients."—*M. Y. Medical Journal.*

Cholera in Spain.—While attention has been directed to Mesopotamia and Persia, and while southeastern Russia has been the object of sanitary precautions, a cholera epidemic has broken out in the province of Valencia, Spain. It showed itself on the 13th of May last at Puebla de Rugat, a village of 700 inhabitants. The disease can not have been imported, the village being remote from the sea board and having no suspicious outside cummunication. It is undoubtedly a local epidemic, caused, it is asserted, by the turning up of earth in the vicinity of a sewer. It will be remembered that in 1884 and 1886 Valencia was infected with cholera. The present epidemic is probably, therefore, a fresh outbreak of the former epidemic.

From May 13 to June 15 100 persons were attacked; of these twenty died.

At Montechelvo there were 7 deaths out of 14 cases. The inhabitants left the town and the disease died out. One case is reported at Valencia and one death at Albaida.

The latest information received is that sanitary cordons have been placed around the infected localities,

and that two-thirds of the population of these places have fled. It has been proposed to burn the earth in fected by the sewers, an excellent means of disinfection when it can be effectively practiced. The quarantine applied in the sea-ports of the provinces against outside communication would seem an unnecessarily stringent measure.

The cholera epidemic of 1884 was especially severe in the province of Alicante. Valencia was visited that year by the epidemic, but only to the extent of 300 cases. In 1885, according to official statistics, there were more than 300,000 cases of cholera in Spain and more than 100,000 deaths, of which 2,612 occurred in the province of Valencia. It is also known that cholera was observed in Spain up to the beginning of the year 1886.

The following sanitary facts may not be without importance in this connection:

The city of Valencia has no system of cess pools. Private dains empty directly into immense sewers, constructed by the Moors hundreds of years ago, and which it is impossible to flush in a dry, warm country which has a slender water supply. Many of the houses are ill-ventilated, ill-lighted, of bad construction, and with slight communication with the outer air. It was in such localities that the greatest number of cholera cases were observed during the epidemic of 1885.

It is much to be desired that Spain should abandon the effete system of quarantine, which does more harm than good and which is equally opposed to sound scientific and humanitarian principles.—*Le Jour. d'Hyg.*

Cancer of the Pancreas; Extirpation; Recovery.—A successful extirpation of a primary cancer of the pancreas is reported by Professor Rugge, of Bologna, (*Medicinische-Chirurgische Rundschau*, April 13, 1890). The patient, a woman, æt. 50 years, came to Rugge's clinic in August, 1889, complaining of constant gastric pain, anorexia, and obstinate constipation. The pain began in the epigastrium, spreading from there to other parts of the abdomen. Physical examination revealed a tumor in the neighborhood of the transverse colon in the left hypochondrium and surrounding the umbilicus. The tumor was rather irregular in shape, felt firm on pressure, and measured about ten inches in length and four inches in width. The author made the diagnosis of probable retro-peritoneal sarcoma.

The patient insisting on the removal of the tumor, operation was undertaken on September 4. The removal was rendered extremely difficult by the softness and fragility of the growth and numerous adhesions. Finally, extirpation was accomplished and the growth was found to be the pathologically changed pancreas, which the microscope proved was carcinomatous.

Healing of the wound was most rapid, and the general condition of the patient improved from day to day, and notwithstanding the fact that she desired and received a mixed diet, digestive disturbances diminished and finally disappeared. The author thinks that this remarkable case shows that after total extirpation of the pancreas other glands perform its functions, particularly Brunner's glands and Lieberkuhn's follicles.—*Medical News.*

Tracheotomy in Infancy.—Dr. Maurice Peraire describes in the *Revue de Chirurgie* for June an instructive case where he successfully performed tracheotomy in a girl 10 months old, suffering from asphyxia due to croup. Dr. Peraire has not overlooked the valuable correspondence on the subject in the vol. i, 1871, *Journal*, in which Dr. Buchanan, of Glasgow, Mr. Cooper Foster, Mr. Vincent Jackson, and Mr. Lawson Tait took part. Opinion was then against tracheotomy in very young children. In a discussion at a meeting of the Pathological Section of the Birmingham Branch of the Association Dr. Russell declared that, on clinical grounds, he would not be a party to tracheotomy in a croup suffering child under 4 years, and the hospital surgeons present were of the same opinion. Dr. Joseph Bell wrote a clinical memorandum, stating that he had operated with success on a child aged 6½ months, suffering from a very severe attack of croup. Mr. Lawson Tait afterwards sent a contribution to our columns, in which he noted a successful case of tracheotomy in an infant aged 7 months. Since 1871 several cases of success in the operation in question, when performed for croup in cases of infants 10, 11, or 12 months old, have been recorded. Steinmeyer successfully opened the trachea in a child aged 2 months, suffering from retro-pharyngeal abscess. Sedillot operated on an infant 6 weeks old, but the alleged diphtheritic nature of the case has been contested. Dr. Peraire, as a result of his own experience and that of other surgeons, confirms the opinions of Mr. Cooper Foster and Mr. Lawson Tait in 1871, then so unfavorably received. Tracheotomy should be performed in infants subject to asphyxia from croup, whatever may be their age. The only real objection is the extreme difficulty of the operation, owing to well-known anatomical and pathological conditions of necessity present under the circumstances.—*Brit. Med. Jour.*

The Heat and its Effects.—Reports of sunstroke are usually of the heat effects on adults, while the direct and indirect effects on the infant population are many times as great. Too often their main nutrient, milk, has become tainted or poisoned from the absorption of germs and gases, making of it a dangerous article of food, and productive of summer enteritis, or other trouble that leads to a fatal termination.

In case of looseness of the bowels, a few doses of the ordinary chalk mixture will usually furnish the desired relief. This should be given in tablespoonful doses, and after every stool. Where there is a weakening of vitality, with very great propriety and advantage, teaspoon-

ful doses of maltine may be added to the sterilized milk; the diastatic power of maltine being capable of rendering soluble and digestable any starchy food that may be in the stomach. Starch foods, such as Irish potatoes and breads, have often been regarded as the immediate and irritating cause of infantile enteric disorders. In part this may be true, and yet these starch foods were the very ones the lacteals and absorbents were crying for, and needed to stay the waste that was going on with fatal rapidity.

Right here the inestimable value of maltine, with its diastatic solvent properties, is quickly made manifest in changing the character of the discharges, and causing an irritant factor to become one of nutrition; given in sterilized milk the benefit of both is obtained.

In the city it is a good thing, in every possible case, to send the mother and infant out to the parks and suburbs for one, two, or three hours after sundown. The car ride is easy, while a shawl or other garment spread on the grass will afford a genuine relief and change from the mother's lap or cradle.—*Ed. Cin. Lancet-Clinic.*

Puerperal Mastitis.—In a paper on inflammation of the breast and its treatment by elastic pressure (*Dublin Journal of Medical Science*), Mr. Andrew J. Howe concludes that:

1. Mastitis is rarely seen, except in patients who have suffered from fissured or crushed nipples, and is the result of infectious matter gaining entrance.

2. That, as a rule, the secretion of milk continues only while the natural stimulus, as nursing or other means, continues to be employed.

3. That the secretion of milk, either in the normal or inflammatory state, begins to abate when such stimulus is withdrawn, and will entirely cease after a week or two.

4. That in all cases of threatened or inflamed breast, well regulated pressure by means of an elastic bandage should be applied, and no attempt should be made to nurse or withdraw the secretion until the entire subsidence of the inflammatory movement.

The advantages of the elastic bandage over an ordinary roller are:

1. It is easier of application.
2. The pressure is more uniform.
3. It is not likely to slip.
4. It is more comfortable to the patient, as requiring much less material.
5. It is not necessary to apply it over the shoulders.

Pathogenesis of Certain Abscesses of the Breast.—The author contributes some clinical observations upon the mooted question as to whether mastitis occurs through the lymph vessels from fissures of the nipple, or from direct emigration of the inflammatory agents through the milk channels. He has positively demonstrated in a series of cases that in the beginning of the inflammatory process the cells could be forced, through pressure, from the milk ducts; these were shown, both by microscopical examination, as well as by culture tests, to contain germs in large quantity.

These facts were the basis of a therapeutic measure, which was employed in 8 cases of acute mastitis as soon as the presence of pus in the milk ducts was ascertained; these latter were once daily emptied by pressure, and in the course of 2 to 3 days complete cure took place.

Sprengal, of Dresden, in commenting upon these observations of Budin (*Centbl. f. Chirurgie*, No. 9, 1890), suggests that, granting that these are borne out by further experience, all children suffering from suppurative processes should not be allowed to suckle from the mother. Vice versa, Budin believes that the child itself may become infected from nursing a breast the site of a mastitis, and is disposed to trace certain cases of furuncle in small children to such an origin.—Dr. Budin, Paris, in *Bull. del Acad. de Med.*

Insomnia and Hypnotics.—See (*Med. Age*) gives the following indications:

1. Insomnia from Pain: Morphine, or antipyrin, acetanilid or phenacetin; sometimes bromides. If visceral, opium or belladonna.

2. Digestive Insomnia: Hot, alkaline water, laxatives, regulation of digestion.

3. Vascular, Cardiac and Dyspnœic Insomnias: Secure ventilation, relieve asthma, by iodides, ethyl or pyrodin; morphine, if iodides fail. Amylene, chloralamid, and especially sulphonal are safe; not chloral and bromides. In cardiac lesions urethan and sulphonal may suffice; probably not, but they are safe. In angina they are dangerous.

4. Cerebro-spinal Insomnia: Sulphonal, amylene and chloralamid can be advantageously alternated in agitated and persistent insomnias of organic diseases or insanity. Functional affections have insomnia from cerebral anemia. Hypnotics, if given, must be watched.

5. Psychical Insomnia: Sulphonal, paraldehyde, chloral succeed best if the loss of sleep be due to worry.

6. Overwork Insomnia.

7. Genito-urinary Insomnia: Rare. Use iodides, cold douches, antipyrin and hypnotics rather than narcotics; with proper regimen.

8. Febrile, Auto-toxic Infectious Insomnia: Often diagnostic. Treat cause; antipyrin in diabetes.

9. Toxic Insomnia: From opium, alcohol, coffee or tobacco.

Treatment of Sprains.—It may be observed that a sprain is frequently treated with a liniment advised by physicians. It is indeed painful to see a physician writing a prescription for a sprain. There are but two indications in the treatment of sprains. 1—To provoke

rapid absorption of the fluid effused around and within the joint; and 2—To favor cicatrization of the torn parts by immobilizing the articulation. Now, the modes of treatment hitherto in vogue do not fulfill these two indications. Massage would seem to present some real advantages, but it can be of little service in the case of severe sprains, and mild injuries would probably do as well under rest alone. An elastic bandage, the depressed parts being covered with a layer of cotton so as to prevent too great pressure over the prominence, and thereby causing sloughs, will meet the first indication, and by its use in procuring rest it will meet the second indication. This bandage acts like massage in promot ing absorption and also secures immobility of the joint. It is of equal service in sprains complicated with rupture of points of insersion, whereas massage would be productive of harm in cases in which splinters of bone were torn away. The practice of relieving the mind of the patient by giving him something to do in the way of applying bad-smelling liniments is a pernicious one, and really shows an unprofessional or unscientific attendant.—*Canadian Lancet.*

A Simple Method of Fastening in Situ an Elastic Catheter after Perineal Section.—For the purpose of fixing an elastic catheter in the urethra during the first few days following perineal sectionfor deep urethral stric ture, Lauensten employs the following method: A silk thread is tied around the catheter, at a point opposite the wound in the urethra, leaving both ends of the thread sufficiently long to allow of their being passed out of the perineal wound when the catheter is passed into the bladder. The wound itself is then packed with iodoform gauze, the free ends of the threads being finally tied over the latter. This serves the double purpose of fixiug the catheter in situ and retaining in place the wound dressing of iodoform gauze. In a case reported the first redressing occurred in 6 days, and the catheter was retained for 12 days. Healing per primam of the urethral wound is claimed to have taken place, except at the point where the threads passed out of the same. The perineal wound had entirely closed at the end of six weeks.—Dr. Lauensten, (Hamburg), in *Centbl. f. Chir.*

Diabetic Food.—An eminent French authority describes a new food stuff for diabetic patients, containing an abundance of nitrogenous substances, and entirely free from starch. It is made from the embryos of corn. M. Danysz, the discoverer of this new bread, has succeeded in isolating the embyro from its farinaceous endosperm, and has also been able to remove from the embryo all oily or other substance calculated to injure its flavor. The product is described as being highly nutritious, easily digested and agreeable to the palate. In many of the Paris hospitals this bread is now used for diabetic patients.—*Cin. Med. Jour.*

The United States and its Doctors.—There is certainly no more curious social phenomenon than that of the extraordinary popularity of the medical calling in this country as a means of securing a livelihood.

The subject is one that is often dwelt upon, but we doubt if many even yet realize the grotesque misproportion which medicine in the United States holds to other bread-winning occupations. Here are some of the naked facts in the matter:

France has 38,000,000 of population, 11,995 doctors, while it graduates 624 medical students in one year.

Germany has 45,000,000 of population, about 30,000 doctors, and graduates 935 students in one year.

The United States has about 60,000,000 of population, nearly 100,000 doctors, 13,091 medical students, and graduates 3,740 studentsin one year.

Germany, which has relatively less than half asmany doctors as America, is already groaning over its surplus. When one compares France with this country, the excess of medical men here seems most astonishing. A comparison of the United States with European countries, in whatever way it is made, leads one to think that there is something almost morbid in our medical fecundity.—*Med. Rec.*

Treatment of Purulent Pleurisy by Injections.—M. Fernet reports to the *Soc. Med. des Hopitaux*(*Jour. de Med.*, May, 1890), his success in the treatment of a case of pleurisy involving principally the diaphragm. A puncture was made and 200 grams of pus removed, after which 15 grams of Van Sweiten's liquid was injected. This operation was repeated each three or four days and at the end of ten days the symptoms had improved, and the fever disappeared. At the eighth *seance*, more than 200 grams of pus was removed, and the failure of the injections haviug been demonstrated, recourse was had to naphtol, that it was thought, owing to its unsolubility, might remain longer in the cavity. The solution of M. Bouchard, consisting of naphthol B 5 grams, alcohol 33 grams and water 62 grams was used. Fifteen to twenty grains of this solution was thrown into the cavity with each injection. After five treatments the pus disappeared and the patient was convalescent. From the results of this case the writer thinks that the method of injection is applicable to certain pleurisies, whether infectious or not, as by this means the pus is evacuated and the center of the disease is reached. That it is especially applicable to circumscribed inflammations and those not readily reached by thoracotomy as mediastinal, interlobular and diaphragmatic pleurisies.—*J. A. M. A.*

Traumatic Neuroses.—The following are the views held on this question by Strumpell (*Rundschau*). 1. After a violent shock, the crises, frequently, are a complicated, but well characterized, complex of nervous symptoms, which is best called general traumatic neu-

rosis. Its appearance is similar to neurasthenia, sometimes to hysteria and certain psychoses (melancholia and hypochondria). Its cause is, in a great measure, due to the great excitement of the moment, but the lasting results of a material concussion, which are not of a demonstrable character, must also be taken into account. 2. Traumatism acting locally, especially on the extremities, produces sometimes a severe nervous disturbance in the affected part, which presents points of similarity to hysteria. Those nervous diseases are called hysterical, which, in a restricted sense, show a lack of normal uniformity between the bodily and psychical efforts. 3. Sharp distinction between a general and local neurosis can not always be made; transitions and combinations frequently occur. 4. Combinations also exist between real anatomico-traumatic lesions and traumatic-neurotic symptoms, a circumstance of diagnostic importance. 5. Finally, sometimes general traumatic neuroses furnish a starting point for the development later of organic diseases,such as paralyses, tumors, etc.—*Va. Med. and Surg. Jour.*

A New Test for Albumen in Urine.—The following tests have been published by Zouchlos (*Rundschan*, 1890) and are recommended on account of their simplicity and accuracy. A solution of one part of acetic acid, and six parts of one per cent. solution of corrosive sublimate is prepared; to this the suspected urine is slowly added, which at once produces a distinct cloudiness. This test is not affected by peptones, uric acid, or the phosphates.

A still more delicate test than the above has also been proposed by Zouchlos. Three ounces of a ten per cent. solution of rhodium potash, with six drachms of acetic acid; of this a few drops is added to the suspected urine. If albumen is present, there is at once formed a distinct cloudiness, which is insoluble in excess of the solution.—*Va. Med. Monthly.*

It Wasn't His Tooth.—Countryman to Dentist: "I wouldn't pay nothing extra for gas. Just lug her out. Never mind if it does hurt."

Dentist: "Well, you are plucky, sir. Let me see the tooth.'

Countryman: "Oh, 'tain't me that's got the toothache: it's my wife. She will be here in a minute."—*Dental Register.*

A More Important Case.—Hackman:-"Is the doctor at home?"

Bridget:"-Yes, sir; he's out in the back yard killing a chicken."

Hackman:-"Call 'im in, I've got bigger game."-*Dixie Doctor.*

USEFUL FORMULÆ.

Treatment of Acne of the Face.—The most rational treatment of facial acne should be based upon the following principles: 1st, to allay the congestion of the skin as far as possible; 2d, to remove all causes which could give rise to the hyperæmia of the face. To obtain these results, both internal and external remedies may be used. The direct care of the skin demands the principal attention. Every morning and evening the face should be washed with a fine sponge. The temperature of the water should be as high as the patient can possibly bear it. After washing, the skin should be dried. Such a washing renders the skin extremely hyperæmic. As soon as the water begins to evaporate from the face, the superficial blood vessels become contracted, and gradually regain their lost tone. In many cases, this simple treatment will be all that is needed, and a speedy recovery will follow. In severer cases, however, the following solution may be employed:

℞ Hydrarg. bichlor. corros.,
Ammon. muriat, - - - aa gr.xv.
Emuls. amygdal. amar., - - fʒxij.

M. et fiat lotio. Sig.: Apply morning and evening.

The following formula will be found to be of equal, if not of greater efficacy:

℞ Aquæ destil., - - - - fʒix.
Sulphur. sublim., - - - - fʒj.
Aetheris sulphuric, - - fʒiij-fʒiv.

M. et fiat lotio. Sig.: Apply morning and evening.

The practitioner may, however, come across cases of such a stubborn nature that even these lotions will fail to effect a permanent cure. In such cases, the only remaining course of treatment is scarification. This procedure never fails to quickly relieve the congestion of the skin and also causes the acne pustules to rapidly disappear.

Regarding the best advisable diet to be pursued during the treatment of acne, little need be said, other than that highly spiced and heating foods should be avoided.—*New England Medical Monthly.*

For Odorous Perspiration, *Revue de Therap.* recommends that those parts of the body which emit the odor should be powdered with a piece of lint steeped in the following mixture:

℞ Powdered rice, - - - - ʒij.
Subnitrate of bismuth, - - ʒvij.
Permanganate of potash, - - ʒiij.
Powdered talc, - - - - ʒjss.—M.

—*College and Clinic Record.*

After a Debauch. - Prof. Brinton gives the following as a good prescription:

℞ Spirit. ammon. aromatic., - fʒiij.
Tinct. capsici, - - - - fʒj.
Spirit. lavand. comp., - - fʒiv.
Soda mint., - - - - fʒij.
Tinct. opii camph-, - - fʒss-j.—M.

—*College and Clinical Record.*

ALCOHOL.

BY J. NOER, M.D. STOUGHTON, WIS.

Read at the Annual Meeting of the Central Wis. Medical Society, June, 1890.

It was my original intention to present a brief resume of recent physiological studies on alcohol. I find, however, that the literature on the subject is too extensive to afford even the merest mention in a paper of this character. I have therefore concluded to direct attention to a meager discussion of the following questions:

1. Has physiological research demonstrated that alcohol in any form is an agent of therapeutic or dietetic value?

(In this paper the term alcohol means common ethyl alcohol represented by the chemical symbol C_2H_5OH.)

2. If so, can we, from physiological data, lay down definite rules for therapeutic usage?

3. In view of the social and economic problems to which the abuse of alcohol has given rise, can we, as a profession, aid in their solution, or in any way mitigate or prohibit the fearful ravages which alcohol inflicts upon humanity?

No single substance mentioned in our pharmacopœia is so often and so generally used as is alcohol. There is probably not a single disease known to man for which it has not at some time in its history been used and lauded as a curative remedy. The Arabian discoverer of the thirteenth century imagined that in alcohol he had found the "spirit of life" that would restore youth and vigor to aged and infirm, health and bliss to the sick and suffering, while to the strong and well it would be a constant source of joy and happiness. It is remarkable that, after so many centuries of almost constant and universal use, we should not yet have settled beyond doubt the secret of its action upon the human economy. The widespread use of alcohol both by the profession and laity makes the study of its physiology a most interesting one to the physician. Says Dr. E. T. Reichert, of the University of Pennsylvania. "The asserted value of this agent (alcohol) as food, its unquestionable efficacy in febrile and adynamic conditions, its peculiar molecular composition and tendency to undergo oxidation and yield energy in the form of heat, render it of peculiar interest in this respect and suggest the value of accurate information of its effect on the economy." The contradictory results arrived at by various experimentors the same physiologist attributes to "the diverse circumstances under which experiments were made, to imperfect methods, faulty observations and deductions; and, among other probable conditions, a more or less complex action in the production of a given effect, in which several factors may be involved which vary in relative importance in different cases, and thus give rise to results which may even be opposite." Much of the contradictory testimony is eliminated by a careful study of the basis upon which the results were obtained. Most of the older studies on alcohol are, as before stated, unreliable or worthless because of faulty methods. For instance, a large number of experiments by Bocker, Hammond. N. S. Davis, Prout, Vierordt, C. Bernard, E. Smith and Berg were based upon the amount of carbon dioxide excreted during the administration of alcohol. Finding the carbon dioxide diminished, they concluded that alcohol was not oxidized. They did not take account of the oxygen consumed during the period of observation, a factor fully as important to note in estimating results as is the measurement of the carbon dioxide excreted. Their results, as proofs of the non-oxidation of alcohol, are, in the light of recent researches, worthless. Again, a large number of studies by Hammond, Bocker, Parks, and Wollowicz, Munk, Riess and Desplatz were based upon the amount of urea phosphates and other effete products excreted while taking alcohol, not taking into account the amount of nitrogenous matter consumed during the period of study. These studies are all of great interest and value, but I cannot consider them as demonstrations of the oxidation or non-oxidation of alcohol in the system. Modern methods have corrected many of these evident errors, but we are yet in the dark as regards many important factors in the physiology of alcohol. At the risk of becoming a little trite, I will briefly state some of the observations which must be regarded as firmly established.

Concurrent studies have, without a shadow of doubt, demonstrated that alcohol taken properly diluted, in moderate doses, is a cardiac tonic and stimulant, its action being due to direct stimulation of the heart. Under moderate doses of alcohol the left ventricle contracts more rapidly and intensely, and the blood flows with greater freedom through the capillaries. The studies of Parks and Wollowicz, Albertoni, Costello, Dogiel, Lussana, Franzen and Binz are practically agreed on this point. In direct contradiction to this result are those obtained recently by H. Newell Martin, a physiologist of undoubted ability and honesty. On the isolated dog's heart, Dr. Martin found that blood containing $\frac{1}{8}$% by volume of absolute alcohol has no immediate action upon the isolated heart; that blood containing $\frac{1}{4}$% diminished within one minute the work done by the heart, and that blood containing $\frac{1}{2}$% always diminished the work done by the heart, and sometimes stopped it. These results of Dr. Martin have been most extensively quoted. They have not, however, been satisfactorily explained, nor have they been verified by other physiologists, and hence can not as yet be accepted as established facts. All physiologists agree that alcohol in large or toxic doses greatly diminishes arterial pressure, paralyzing the heart muscle by its direct action.

On the stomach and digestive function small doses stimulate functional activity, while toxic quantities interfere with digestion, and, if continued any length of time, give rise to the well known chronic alcoholic

inflammation of the mucous membrane of the digestive canal.

On the body temperature the drug always produces a fall in persons not habituated to its use, the effect being always in direct proportion to the dose.

On the function of respiration, Zuntz and Geppert noted a slight increase, amounting to about 7% under alcohol.

The general phenomena resulting from the action of this agent on the nervous system is thoroughly familiar to us all, but as regards its order of action or the nature of the changes produced in the nerve centers, I have been unable to find any physiological data. The generally accepted theory seems to be that its action is similar to that of ether.

What becomes of alcohol after its introduction into the system? What effect does it have upon nutrition and the metabolic processes of the body? Is it eliminated unchanged or is it oxidized or otherwise changed, so that its constituent elements become part of the body tissues, or does it conduce to heat and energy formation? These problems have been most thoroughly studied, and the literature on the subject is voluminous. From the time of Liebig's celebrated classification of food until the appearance of the memoir of Lalleman, Perrin and Duroy, alcohol was regarded as a most potent heat generator. These physiologists, finding that alcohol was at least excreted as such by the lungs, the kidneys and the skin, and being unable to detect any of its oxidation products, as acetic acid and aldehyde, now affirmed that alcohol was never oxidized, but escaped from the system unchanged, or was retained in the tissues. They were, however, never able to recover but a small fraction of the ingested alcohol, but this they thought due to the fact that the rest had been retained in the system, or that their test had not been sufficiently delicate to detect it. These claims were soon disproved by the elaborate and carefully conducted experiments of E. Boudo (in 1863). He demonstrated conclusively that the amount of alcohol eliminated by the kidneys, except after enormous doses, was so small as practically to amount to nothing. Boudot also showed that the test used was sufficiently delicate to detect .165 grain of alcohol in one quart of water. Later (1866) Dr. Schulinus, by very elaborate and laborious investigations, confirmed the results of Boudot, showing that alcohol taken into the blood finds its way by exosmosis into all organs in similar proportion, and does not escape from the body unchanged except in very trifling amounts. These careful and laborious studies, together with those of Adolph Lieben, Anstie, Thudicum, Dupre, Subotin and Guido Bodlander have practically proven that but a minute part of the ingested alcohol can be recovered as such either in the tissues or in the excretions. Since there must of necessity be a limit of capacity to oxidize alcohol in the system, the amount recoverable must differ according to the quantity imbibed. Bodlander found, after taking different quantities, that the elimination by the kidneys was about 1.2%, by the lungs about 1.6% of the quantity taken. In dogs he was able to recover from the urine 1.6%, from the lungs about 2%, and from the skin about 0.14% of the amount ingested.

If alcohol be added to living blood about 10% will disappear almost immediately. Dogs have been given daily doses of alcohol for a week and over, then killed, and their tissues minced and extracted for alcohol, but only one-fourth of the quantity given at the last dose has been recovered.

Henbach, who experimented on patients with fever by giving alcohol in doses of from 18 to 20 cc., found, as a result of 22 observations, an elimination in the urine of 1.12% of the quantity administered. It is evident, judging from these concurrent studies, that some of the alcohol ingested disappears. It seems reasonable to conclude that the quantity so disappearing is oxidized. In apparent contradiction to this conclusion is the fact that the amount of oxygen consumed, the carbon dioxide eliminated as well as the urea, phosphates and other products of tissue metamorphosis, are actually diminished under the use of alcohol. That alcohol rapidly undergoes change after absorption, that but a small percentage is eliminated as such, and that neither in the system nor in the excretions are found any immediate oxidation products, is clearly established. What becomes of it, or in what form eliminated, are problems awaiting solution.

It has been ascertained that alcohol during its complete oxidation yields an enormous amount of energy in the form of heat, one grain setting free nine kilogram degrees. If the quantity taken by Bodlander, 100 cc., were thus oxidized it would yield about fourteen times the total approximate heat production of an average man per day. The carbon dioxide formed would equal one-sixth the mean average. It would appear that such results would be capable of measurement by the modern calorimeter. A number of observations have been made, but they are, perhaps, too few to warrant definite conclusions. They indicate, however, a possible solution of the problem. After a recent series of eighteen calorimetric experiments on dogs, Dr. Reichert concludes (*Ther. Gaz.*, February, 1890): "That alcohol does not effect the total quantity of heat produced. That more heat is dissipated than produced. That the fall in temperature is due to the excess of heat dissipation, and is in direct proportion. That in all likelihood, alcohol, by undergoing oxidation, yields energy in the form of heat, thus conserving the tissues and acting as food."

Zuntz and Geppert, who have carefully studied the subject, declare that in healthy adults accustomed to its use, alcohol affects but slightly the quantity of oxygen absorbed in the amount of carbon dioxide eliminated. The lessening of carbon dioxide under alcohol has been plausibly explained on the hypothesis that it acts directly on the heat processes, decreasing normal tissue changes, thus diminishing the amount of carbon dioxide formed in this way, and supplying a portion from

its own decomposition. Calorimetric experiments appear to support this view.

The consensus of physiological and clinical testimony indicates that alcohol in large doses is a narcotic poison, and that there is a decided difference of effect when given in large or in small or moderate quantities. When a quantity not exceeding one and one-half to two ounces of absolute alcohol, properly diluted, or three or four ounces of whisky or brandy, or about one-half pint of strong wine is taken in divided doses per day by the healthy adult, the quantity so taken is a stimulant in the ordinary sense of that term. In certain conditions of disease this quantity may with advantage be vastly increased, the alcohol, in this instance, serving not only as a stimulant, but also as a readily oxidizable hydro-carbon, or, in other words, as a food, giving out energy and sustaining the vital forces. Says Horatio C. Wood in the recent (1889) edition of his "Principles of Therapeutics:" "It is certainly deducible that alcohol in small amounts is an arterial and cerebral stimulant increasing functional activity in the nervous and circulatory apparatus; that it is a food in the sense that it is destroyed in the system and yields force which is utilized by the organism, and that it is, when in sufficient quantity, a retarder of tissue changes, checking the excretion of nitrogen."

Within the bounds of these circumscribed limits, I believe we may prescribe alcohol on physiological grounds. It should not, however, be forgotten that when more alcohol is introduced into the system than can be utilized by the processes of oxidization and nutrition, the surplus remains diffused throughout, the blood and tissues give up no energy, but paralyzes the whole nervous system, its repeated abuse causing diminution of mental and physical vigor, and producing in the tissues the degenerative changes known as fibrosis and steatosis with pulmonary empyema, gastric, renal and hepatic cirrhosis.

It has been a matter of great interest to investigate to what extent physiological facts would bear us out in the various clinical applications of alcohol. By the observing and judicious therapeutist, this agent can, no doubt, be used to great advantage. Its application must, however, be considerably restricted as compared with ancient standards, and the dose always designated as clearly and precisely as in the case of opium or chloral, or the remedy may, as Dr. Ringer has so well said, "do more harm than good." There can be no doubt but that alcoholics have in the past been too loosely and too often prescribed by the profession, and the charge that we are helping to perpetuate the liquor habit is not without a shadow of truth.

Universal experience has demonstrated that it is never safe to trust to the patient's sensations in regulating the dosage of a given remedy. If the physiology of alcohol has demonstrated anything, it has demonstrated that the effect produced is in direct proportion to the quantity imbibed. Clinical experience teaches that if alcohol is to be prescribed at all it must be prescribed under the most rigid therapeutic regulation. Perhaps the immediate danger is not so great, but the ultimate results are such as ought to make us stop and consider before recommending alcohol in chronic cases. The general *ad libitum* prescription must be absolutely discarded, and the use of liquor in minor and chronic ailments relegated to the nostrum monger.

Many of the most eminent physicians have discarded entirely the use of alcohol in disease. Says the venerable, but clear-minded, Dr. N. S. Davis: "It is now 35 years since I commenced the direct clinical study of the effects of alcohol as a remedial agent. I have used the sphygmograph and all other means of testing the strength of the heart and the efficiency of the circulation in every variety of low forms of febrile diseases coming under my observation, and I have never found any instance in which it increased the cardiac force or the efficiency of the general circulation."

Though I cannot agree that these statements of Davis are warranted either from the standpoint of scientific investigations or clinical experience, yet I cannot but regard his opinion as worthy of careful consideration.

Medical celebrities, as Binz, Forel, Laborde, Norman Kerr, B. W. Richardson, Sir Henry Thompson, and others no less eminent have declared against the free use of alcohol therapeutically.

It is no part of my plan to discuss the social and economic relations of the liquor question, but it may not be out of place to note in passing that I believe we, as medical advisers, possess the only weapons that are of any avail in dealing with this monstrous evil. We are the natural and trusted guardians of the physical welfare of humanity, and I assert with positive conviction that it is within the power of the one hundred thousand physicians of our country to reduce the evils of drunkeness to insignificant proportions by a united appeal, not to moral principles, but by an appeal to the ever-responsive motive, *selfishness*. The preservation and perpetuation of *self* is the ever responsive motive of all living beings, and as we possess incontrovertible proofs that alcohol, as commonly used, is not conducive to health and longevity, it only remains for us to make these things generally known. Whatever mitigation of the evil has been produced in recent times must be largely attributed, not to the rigid legal restrictions imposed, but to the general education of the people and a public sentiment condemning drunkenness. When we consider the extraordinary expenditure of labor and money, the frantic appeals and steadfast devotion to the cause of total abstinence by millions of good men and women, without, as admitted by present reformers, having accomplished any efficient results, it is justifiable to conclude that there is some radical error, either in diagnosis or treatment, that the appropriate remedy has not been applied, or, if applied it has not been effective because of the idiosyncrasy of the patient.

One of the most difficult questions in the discussion of the liquor problem has been in regard to the relation

which alcohol sustains to the human economy. On the one side stand those who maintain that this compound is always a poison, that its effect upon the tissues is at all times and under all conditions deleterious, that it is never oxidized or utilized by the organism as a food or energy producer. It is the devil's invention, they claim, the cause of all misery, of all sorrow, of all depravity and sin; of all crime and all evil, and should be banished from the face of the earth and thus turn our unhappy planet into a paradise of uninterrupted joy and bliss. Opposed to these radical views stand the great body of medical and scientific men, who, from clinical and scientific observation, have learned that alcohol is an agent of good or evil in accordance with its usage.

I have no panacea to offer that will cure the evil, no fixed ideas to promulgate, but I have faith in the ultimate solution of the question through the honest teaching of the family physician. It is possible that a truthful knowledge of the physiology of this potent compound will mitigate the evil and protect coming generations, but the absolute banishment of alcohol and drunkenness from society will take place when its twin sister, licentiousness, has become an unknown sin.

It is an ideal dream of mine, that some day there will arise from amongst the silent and ever-faithful family visitors, the physicians, the witnesses of so much secret vice and sin, of at times a depravity that would turn pale the cheeks of a Nero, but to whom is also accorded the happy consolation of being the friend and confidant of the noblest purity and virtue, it is, I repeat, my fond hope that amongst these devotees to truth and duty will arise that genius who shall solve the difficult problem and banish drunkeness and vice from society and restore man to eternal bliss and happiness.

BINOXIDE OF MANGANESE—ABORTION.

BY J. C. MOORE, M. D, OMAHA, NEB.

Some time ago a lady, æt. about 32 years, spare build, nervous, despondent nature, the mother of 3 children, came to my office for treatment. She stated in a seemingly candid, intelligent manner that she had female trouble, was irregular in menstruations and had passed her period some ten days or two weeks. An ocular examination disclosed that she was suffering from laceration of the cervix. Stating the trouble, I informed her that I could do nothing until I was satisfied as to whether or not she was pregnant.

I prescribed two grain binoxide of manganese pills to be taken one after each meal, and asked her to call again after menstruation. She returned to her home and on the fourth day began flowing; this continued for about six weeks when she gave birth to a four month fœtus. Her attending physician informs me that flowing was excessive at times but that he did not suspect pregnancy until labor began. The third day after this she was taken with violent chill, the forerunner of pelvic cellulitus and sepicæmia.

Two days after the miscarriage the womb was wiped out with a 60% solution carbolic acid, as septic trouble had already developed, temperature reaching 102. I know little of the after-treatment, but as her attending physician is an able man I judge that all was done that could be done after the real trouble was discovered. She died just eight weeks after flowing began. I would like to have some member of the profession who has had more experience than myself (I have only used the binoxide of manganese occasionally for eighteen months) give some information in answer to the following questions:

1. Is binoxide of manganese considered an abortifacient in the dose and manner prescribed?

2. Was the wiping out of the womb with the 60% carbolic acid solution justifiable under the circumstances?

A DOUBLE-HEADED CHILD.

The above is taken from a photograph of a two headed child, shown at the meeting of the Society of the Missouri Valley, at St. Joseph, Mo., March 20, 1890, by a lady physician, whose name we do not know. The child lived an hour or two.

POPULATION OF THE UNITED STATES.—Approximate computations place the total population of the United States between 64,500,000 and 65,500,000 inhabitants.

REPORT ON PROGRESS.

THERAPEUTICS.

BY F. NEUHOFF, M.D

The Uses of Calcium Sulphide.

Dr. John Aulde (*Therap. Gaz.*) says:

One-tenth of a grain of sulphide of calcium taken internally every one to two hours, in connection with the local application of antiseptic washes and the observance of restricted diet and exercise, will often abort a boil or carbuncle, when the treatment is instituted early, before the formation of pus.

When, on the other hand, the boil or carbuncle has progressed so far that suppuration is inevitable, the malignant character of the disease can be overcome and suppuration kept well in hand by the judicious use of calcium sulphide.

Felons also will frequently be prevented from suppurating by the timely use of this medicine, associated in this instance with sedatives. When the pain is severe, it is well to apply locally clay and water, prepared in a semi-solid form, and kept constantly on the affected finger in such a manner that it will answer as a temporary support.

In the treatment of ovarian and uterine affections, as well as of toothache and earache, in fact in all cases where suppuration is threatened, sulphide of calcium will serve a useful purpose.

It is also efficient in the treatment of bronchitis and croup.

Pilocarpin in Chronic Rheumatism.

Charles Hochalt reports the following case in the *Orvosi Hetilap*: Mary Molnar, æt. 45 years, cook, had two attacks of acute articular rheumatism during the last three years. On admission to hospital, wrists, elbows, knees, as also joints of the feet and hands of patient were painful, and almost completely anchylosed. None of the joints except the elbows showed any structural change. The latter were enlarged and crepitant. Muriate of pilocarpin, in 2% solution, was used hypodermically at intervals of three or four days, in doses of from 1 to 2 ctgm.

A change for the better soon came, and after the ninth injection, the stiffness of the wrist and fingers was relieved, and patient was able to walk about. The elbow joints, however, failed to show any change.—*N. Y. Med. Rec.*

Resorcin in Whooping-Cough.

Dr. Juan Vinra y Careras lauds the treatment of whooping cough by a 1 in 70 solution of resorcin, with which he touches the mucous membrane of the pharynx and of the vestibule of the larynx. At the same time he gives sufficiently large doses of chloral to sooth the excitability of the superior laryngeal nerve.

Dr. Guerra also favors the use of resorcin application. He employs a 10% solution every three hours. When once the paroxysms have disappeared, he treats the cough which remains by means of balsams.—*Le Union Med.*

Besides this method of applying the resorcin solution with a swab, other authors have used it as a gargle or a spray. Some also recommend its administration internally. For the latter purpose, however, weaker solutions are advised. Good results appear to result from any of these methods, and their choice must be determined by the peculiar circumstances of the individual case.

Salicylate of Cinchonidine.

Dr. McCall (*Med. News*) finds salicylate of cinchonidine very effective in those cases of obscure pathology, in which the symptoms of both rheumatism and neuralgia are blended together. Such cases are characterized by pain or soreness and stiffness of the loins, with or without impairment of function of the smaller joints, with a history of previous attacks, and with no permanent organic lesion.

The author relates at some length the histories of several such cases, in which speedy and seemingly permanent relief was achieved by the use of salicylate of cinchonidine in doses of 4 or 5 grains every 3 or 4 hours. Some of these cases had suffered for years from persistent pain in the back, from which they were unable to find relief by previous treatment.

Why salicylate of cinchonidine should be more effective in the above cases, than salicylic acid or sodium salicylate given in conjunction with quinine, Dr. McCall does not attempt to explain, but contents himself with the knowledge that such is the fact.

When to Administer Quinine in Intermittent Fever.

As quinine does not have any effect until six hours after its administration, it must be administered at least that number of hours before the beginning of the attack of fever which it is intended to avert.

We must distinguish, however, between the real and the apparent beginning of an attack. The apparent beginning is manifested by the occurrence of the chills. The real beginning, however, is determined by the rise of the temperature from 37° to 38°, to 39°C., and by the increased excretion of urea through the kidneys.

The real precedes the apparent beginning by two hours in the quotidian type, by six hours in the tertian type, and by twelve hours in the quartan type.

It follows, therefore, that quinine should be administered 6+2 or 8 hours before the expected chill in the quotidian type. It should be given 6+6 or 12 hours before the chill in the tertian, and 6+12 or 18 hours before the chill in the quartan type.

The medicine should not be given in fractional doses, for given in that manner it never has the full effect of the whole amount taken. An irritable stomach, however, may necessitate the administration of fractional doses. In that case the dose must be given at short intervals, so that the whole amount of medicine shall be taken in three-quarters to one hour.—*Revue de Clin. et Ther.—Central. f. Therap.*

The Physiological Action of Chloralamid.

M. Quinquand, in the name of Mairet and Bose, submitted a note on chloralamid to the Society of Biology.

Until the present time chloralamid has been represented as a hypnotic without any influence on the heart. It has, therefore, been regarded as being the ideal hypnotic.

The authors above mentioned, however, prove that chloralamid does have a certain action on the heart, and that it lowers the arterial tension, and therefore exposes to all the congestive accidents.—*La Trib. Med.*

Resorcin in Malarial Fever.

J. C. Erwin (*Tex. Cour. Rec. of Med.*) has found resorcin an invaluable remedy in malarial fever, acute or chronic. It did not fail to effect a cure in a single case, though it was administered by Erwin in many cases in which quinine had proved powerless. The following formula may be employed:

℞ Resorcin, - - - ʒij.
Aquæ, - - - ℥iij.

M. S. Teaspoonful three times a day.—*Medical Analectic.*

Since reading the above I have had occasion to meet several obstinate cases of recurring chills, on which quinine failed to make any impression, but which were speedily relieved by resorcin in 5-grain doses. We, therefore, second Dr. Erwin's opinion as to the value of the drug in malarial fever.

The Phosphates in Nutrition.

The researches made fifty years ago by Boussingault, Dumas, Liebig and many others, have demonstrated that phosphate of calcium is indispensable in the formation and life of animals, as of plants.

It not only forms the mineral part and, as it were, framework of the bones and teeth, but it is also an integral part of all the elements of the body, principally of the brain, the marrow, the nerves, the muscle and the blood. It is in fact the support of the organic substance of all the cells. The phosphate of calcium is especially indispensable to pregnant or nursing women, who, in addition to supporting their own bodies, are compelled to furnish material for the formation and development of a new organism.

It is likewise of the greatest necessity for children during their period of growth.

Insufficiency of this principle must produce weakening of the constitution and dental caries on the part of the mother, and, on the part of the infant, curvature of the bones, late and painful dentition, and a state of general debility.

M. Meje-Mouries has shown by numerous chemical analyses of the milk of nursing women, that very often it is deficient in phosphate of calcium. Especially is this true of residents in the city. The cause of this, no doubt, is that during pregnancy, the digestive disorders, which are so frequent, prevent an active assimilation of this principle in the state in which it is contained in the food.

The idea of adding some extra phosphate of calcium to the food suggests itself spontaneously. But the difficulty of making the compound enter into the economy is well known.

When it is mixed with the food, it ordinarily passes as a foreign body into the salts of the urine, without benefiting the organism.

In the course of his scientific researches, Mouries was led to discover a combination of phosphate of calcium which is susceptible of being utilized and retained in the organism. He obtained, in fact, a new compound, an albumino-phosphate of calcium, which is the form in which nature seems to have put the salt in small quantities in eggs, milk, grain, etc.

Drs. Loze and Pegot Ozier have during five consecutive years experimented with this preparation of Mouries, which is commonly called ostein, because it is especially destined for the osseous system.

The results of these experiments were reported to the Academy of Medicine. Remarkable facts are therein chronicled. Thus the use of ostein during pregnancy permitted the birth of living and vigorous infants from mothers who had many times aborted, or whose children had hitherto come into the world weak, and had succumbed soon after birth.

Again, under the use of ostein, pregnancy was more easily endured. The pregnant woman lost neither her strength nor her good general health, and having arrived at term was in a splendid condition for being an excellent nurse.

Moreover, the milk of women taking ostein is more abundant and richer in phosphate. The children improve in health, their dentition is easy and their growth rapid.

Thus both during pregnancy and during lactation the woman derives great benefit for herself and her offspring by the use of ostein.

On account of its tonic and reconstructive properties, the ostein of Mouries finds an advantageous employment in anæmia, and in osseous and pulmonary tuberculosis. It is all the better, because the cavities, to affect a cure, fill themselves with the deposits of calcareous matter.—*Le Bull. Med.*

The Galvanic Current Used as a Laxative.

Dr. John Shoemaker, in the *Med. Bull.*, says:

The use of the Faradic current strongly resembles massage in its manner of promoting intestinal peristalsis. For, whatever additional the faradic current may effect, it certainly executes massage of the most searching kind.

The galvanic current, on the other hand, has a laxative effect, which can not be explained as being due to its property as massage, because it is well known that it has no such property of massage.

I have of late used the galvanic current as a laxative in chronic constipation.

The poles are placed as in the treatment of hypertrophied prostate. The rheophore representing the negative pole is introduced into the rectnm, while the sponge-covered rheophore of the positive pole is applied over the perineum. The patient himself should be allowed to adjust this latter rheophore, thus enabling him by more or less pressure to graduate the current, so as to suit all movements of the sensitive mucous membrane of the rectum.

The strength of the current should be about 1 milliampere, rather less than more, so that the patient will feel at first as if no current at all is passing. In the course of 15 or 20 seconds, however, he will feel it gradually rising from the cold of the olive-shaped rectal electrode to the warmth of the same object, gradually heated to a point of painless tolerance.

In about one minute after the application of the current the sensation of desire to go to stool becomes manifest, and at the end of two minutes the average patient can generally be affected to the degree requisite to secure a pleasant passage.

The application of the current as above described produces two phenomena which explain the laxative effect produced. They are:

1. A trickling in the rectum, which shows that a general discharge from the mucous membrane is produced.

2. If the pole at the perineum is quickly removed the sphincter ani forcibly contracts, which proves that the whole of the rectum and the lower portion of the bowels are dilated by the negative pole, and when the current is broken the sphincter goes back to its natural caliber, *i. e.*, contracts.

Should, however, the poles be reversed, so that the electrode in the rectum is the positive pole, and that over the perineum the negative pole, then the sphincter will contract as soon as the pole on the perineum is put in position (and the current completed), but the sphincter remains quiescent when the electrode is withdrawn (and the current broken).

Scientifically speaking, the above results prove that anode closure dilates and cathode closure contracts a mucous membrane channel.

The mucous discharge caused by closure of the anode is in strict conformity with above facts, inasmuch as parts secreting do not show increase of functional activity by contraction, but by expansion.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, AUGUST 16, 1890.

ELECTROCUTION.

We do not know the authority for the use of this word, but find it a convenient caption, as others have, for the little that we have to say on the present electrical sensation. If our readers might not think us neglectful of current topics we would rather feel disposed to defer remarks on the recent execution of Kemmler, at Auburn, N. Y., by electricity to a later date, when an opinion of the affair as a whole can be more satisfactorily reached. In considering it at the present writing we must remember that many actually false statements have been and are still being made by interested electricians on one side, by prejudiced physicians and other so-called scientists on the other hand and by imaginative and prevaricating newspaper men on all sides.

It will be remembered that the report was current some months ago that when the Westinghouse firm discovered that the State of New York proposed to use apparatus of their manufacture for the purpose of capital punishment, because it would furnish the most deadly current, they objected very seriously to this kind of an advertisement of their goods. Why they should have gone to so much pains in this matter, when there were almost daily examples in New York and other cities of what this current could do in the way of killing men and horses, we cannot imagine. But it is said that other companies with less deadly currents were prepared to make capital out of the example that the State was about to make of the Westinghouse dynamo. Hence the fight, to which, it is said, is largely due the delay in the execution of this unfortunate first victim of *electrocution*

Regarding the execution one gentleman connected with the above mentioned firm is reputed to have said:

"It was a brutal affair and could have been better done with an ax." The public, he said, would lay the blame where it belonged, and it would not be on his associates. Another, similarly connected: "From what I have been able to learn, I am of the opinion this will be the first and last execution of the kind in this country, at least I hope so. I am inclined to think Kemmler was not killed by electricity, but that when the application of the 1,300 volts roasted and sizzled him the executioners completed the horrible work by hitting him on the head with a club."

So much for the opinions of the electricians who have thus far had much to say, at least publicly. Now for the physicians who have figured prominently in this matter. We of the noble profession have observed more closely than our less-knowing lay brethren that in every community there are a few restless souls amongst us whose names always come to the front, *i. e.*, into the head-line of the daily prints, in connection with every sensation of moment. Our only motive in citing this fact here is to remind our readers that the observations of those who have fallen into this unfortunate habit of sensational prominence have as a rule with us little value. Hence in this instance when the medical opinions thus far expressed are only from two of the most well-known of the type above described, we feel that we may profitably wait for others.

As to the perfidiousness of the press, perhaps it is unnecessary to say anything. However, one example. One of the St. Louis dailies heads its telegraphic account thus:

"A Brutal Affair."

"The Awe and Mystery of Death Intensified a Thousand Fold," Etc.,

joining in what at this writing seems to be a fashionable condemnation of the procedure. Yet the same issue contains what seems to us a very sensible editorial:

"As far as can be determined from the reports of the execution of Kemmler the unpleasant features of it were due to the blunders of the men in charge rather than to the mode of execution. The current which passed through Kemmler's body was probably not quite strong enough and was cut off earlier than it should have been. The burning of flesh was caused by the too long continuation of the second application of the strengthened current and the consequent drying of the sponges in the electrodes, which were not properly adjusted in the first place. Execution by electricity cannot, therefore, be pronounced a failure on this first mismanaged experiment. But even the bungling work which was done yesterday did not bring more repulsive results than attend the average hanging."

If electricity continues to be used as a means of execution, and we see no reason why it should not, in the nature of things, more perfect appliances will come into use, which may be more accurately and rapidly adjusted than those used in this first instance. In fact the wonderful improvements of to-day in all manners of electrical apparatus and appliances are an earnest of a perfection that will in the future make our apparently wonderful contrivances of to-day appear clumsy.

Bromoform in Pertussis.

In the Review of October 12, 1890, we called attention to a report by Dr. Stepp, of Nurnberg, on the value of bromoform as a remedy in whooping cough. The results he claimed to have attained in this usually stubborn disease were quite ideal in character, and on this account, perhaps, his statements may have met with a little incredulity. The importance of the subject is so great, however, that we may be pardoned for recurring to it again. The statements of Dr. Stepp aroused considerable interest, and Dr. Loewenthal, the clinical assistant of Professor Senator, at whose suggestion the treatment was given a fair trial, now reports a series of cases which fully corroborate the claims made by Stepp. (*Berlin. Klin. Woch.; Med. Chir. Rundschau.*) The report is of such interest that we give it in extenso. Lowenthal says that he has used bromoform for the past three months, and that he has always gotten favorable results; the remedy might almost be termed a "specific" in this disease, and it is equally effective whether it is employed in the beginning of the trouble, or in the catarrhal or convulsive stage.

A total of 100 patients were so treated, 45 boys and 55 girls; the youngest child was æt. 8 weeks, the oldest 7 years. Two to five drops were given four times daily, according to the severity of the case and the age of the patient. The bromoform is best given floating in a little water. Each case generally required 2½ to 4 drachms of bromoform; the largest amount given one patient was 5 drachms. It must be borne in mind that bromoform must be protected from the sun; if not it becomes yellow and cloudy, and cannot be used. Occasionally good effects were seen on the second day of its administration, but more frequently on the third or fourth day, according to the severity of the cough. The worst cases improved visibly in the first week, and the attacks of cough became less frequent. During this time the vomiting also ceased. A few days sufficed for the removal of any signs of bronchitis which might be present. The children could usually be discharged as cured in from two to four weeks. It is to be remarked that among the children treated at the hospital were many in very poor general health, who had suffered with some other disease just previously, such as measles, etc. In a few cases pneumonia had set in as a complication, but in spite of this the result was always a favorable one. Where bromoform had not been used for a long enough period the disease occasionally recurred, but did not persist long after the remedy was again employed. In a few cases fatigue and sleepiness followed each administration of the drug, and in one case certain symptoms of intoxication or narcosis were observed; this was in a weak patient, æt. 1½ years, to

whom 1¼ drachms had been given in the perion of three days. The child appeared to be in a sound sleep; the face was pale, the pulse scarcely perceptible; the pupils were small and reactionless. The muscles were relaxed. On auscultating the thorax anteriorly the inspiratory murmur was long and deep, the expiratory murmur and heartbeat could scarcely be heard. Seven minims of ether were injected hypodermically, whereupon the child woke up, and moved its hands and feet; the pupils dilated. This only lasted for five minutes, when it went into its previous condition. The injection was repeated with the same good effect as before; the child was able to take a little wine. A thorough examination of the chest now revealed a beginning pneumonia of the right upper lobe. The child was put on powdered camphor and benzoic acid, each half a grain every two hours, warm applications were made to the chest, and a nourishing diet was ordered. The pneumonia was over in five days, and bromoform was now given for the pertussis, the result being a complete recovery.

MEDICAL ITEMS.

Yellow Fever.—An epidemic resembling yellow fever is raging at Belize, Honduras.

Professor Mikulicz has been called to the Chair of Surgery at the University of Breslau.

Sir Morell Mackenzie, who it was expected would lecture in this country next October under the management of J. B. Pond, has sent word that his health will prevent him carrying out his engagement. He offers to come next year, however.

The International Congress of Hygiene.—The Prince of Wales has accepted the post of President of the International Congress of Hygiene, which will be held in London in 1891. He has fixed Aug. 10 as the probable date at which he will open the Congress.

Love's Malady.—Eugenie D., the actress, had been sick with vaginitis for ten days, and bore her malady with true amiability. Dr. Rivarol remarked to her: "Your health proves that you are very amiable, and your disease that you are very much loved."—*Cin. Lancet-Clinic.*

Insanity in Italy.—It is stated that insanity is constantly on the increase in Italy. The proportion of lunatics to the entire population is nearly as 1 to 1,000, whereas seven years ago it was as 1 to 1,476. Among criminals the proportion is very great, being in exact figures 12.25 per 1,000.

To Dry up the Secretion of Milk.—Dr. Darey reports in the Montreal *Medical Journal* a case of supernumerary breasts, in which it was desired to dry up the secretion of milk in the extra mammæ. This the patient assured him that she was always able to do by making a hot saturated solution of common salt, and applying it constantly on cloths as a fomentation.—*Med. Rec.*

Leprosy in Dutch Guiana.—According to statements made by the Roman Catholic Bishop of Dutch Guiana, leprosy prevails to a more serious extent in that colony than is generally supposed. Three of the Redemptionist fathers have been attacked by the disease, and one is now slowly dying of it at the leper station of Batavia.

Nothing Sharp to Cut With.—Young Father.—"Blamed if I know what's the matter with the baby, Doc., but she cries all the time."

Doctor.—"Perhaps she has been cutting her teeth."

Young Father.—"I don't believe it, Doc.; she ain't had a knife or anything sharp to play with since she was born."—*Judge.*

A Gallant Jury.—Some weeks ago a young man died in Liverpool, to whom his employer, a woman, had administered two and a half ounces of sulphate of magnesia, followed up by a dose of jalap, for the relief of severe abdominal pain. The jury was so gallant as to overlook this heroic treatment, and definitely stated the cause of death to be the habit which the deceased had, of using brandy in moderation.

Chicago Polyclinic.—The faculty of this institution have made the following appointments: Dr. G. Futterer (late chief assistant to Prof. Rindfleish, of Wurzburg), Drs. F. C. Hotz and E. Fletcher Ingals, Professors of Internal Medicine, Ophthalmology and Laryngology, respectively; also, Drs. Chas. F. Stillman, P. S. Hayes and J. M. Patton, Associate Professors of Orthopædic Surgery, Electro-Therapeutics and Medicine, respectively.

Methylene Blue as an Analgesic.—In methylene blue that is free from chloride of zinc or other impurity, Professor Ehrlich and Dr. Lippman, says the *Lancet*, have found a safe analgesic that is cheaper than antipyrine and can be administered hypodermically without causing pain. It was given subcutaneously in grain doses; internally from a grain and a half to four grains were given, though fifteen grains a day produced no toxic symptom.—*N. Y. Med. Jour.*

Poisoning From Cyanide of Potash.—In Halle, Germany, a man attempted suicide by taking a considerable quantity of a solution of potassium cyanide. In order to render his exit doubly sure he afterwards drank of a solution of atropine, which he had previously procured. He went into repeated fainting spells, which caused him to be brought to a hospital; on the next day he had fully recovered, although no antidote of any

kind was given him. Atropia may therefore be regarded as a valuable antidote in potassium cyanide poisoning, and, indeed, it has been previously recommended for this very purpose.

A New Method for Local Anæsthetics.—Dr. Voituriez, in *Moniteur Therapeutique*, recommends a method which certainly possesses the merit of simplicity. It is based upon the well-known anæsthetic properties of carbonic oxide, and consists in pouring on the place to be anæsthetized the contents of two or three bottles of seltzer water, preferably by means of the siphon, which releases the water in a strong stream. The anæsthesia lasts five minutes and then gradually disappears.

Night Sweats of Phthisis.—Tennesson recommends, after atropia, agaricus and other means have failed, the use of secale cornutum in 15 grain doses ½ hour before the beginning of the expected sweat. This dose may, if necessary, be repeated after an hour or two, and may be given on three successive days. The sweats fail to appear, if not the first, then the second night, and the effect lasts for one to two weeks. Instead of the powdered drug, ergotin may be given subcutaneously in $^1/_{100}$ grain doses.

Frau Rosa Kerschbaumer, the wife of a physician, formerly assistant to Arlt, in Vienna, has obtained permission to practice medicine in Austria. This is said to be the first instance in which such a privilege has been granted to any woman in that benighted country. The lady was graduated in medicine in the university of Berne, and has for some time practiced in company with her husband in Salzburg, her work, however, being done secretly, her husband being responsible for all that she did as a physician.

A Costly Nap.—A well-known therapeutist who left London to conduct an examination at one of our ancient feats of learning, recently fell asleep in the train, and only awoke to find himself at a town far distant from the would-be scene of his labors. He was fortunately enabled to get a special train back—a luxury with which he would probably have gladly dispensed—and put in an appearance an hour or two late, to the great relief of the gentlemen who were anxiously awaiting his arrival.—*Med. Press and Circular.*

Artificial Celluloid Eyes.—Dr. Meurer, of Lyons, warns physicians against the use of artificial eyes made of celluloid. They are cheap, and of good appearance, and for the first three or four months render good service. After this, however, they undergo chemical changes, and set up a high degree of irritation. Meurer has repeatedly overcome the resultant inflammation by antiseptic treatment and suspending the use of the artificial eye. So soon as the old eye was again used the inflammation returned, but on using a glass eye the parts remained normal.

Cholera in Spain.—The official statistics state that there were 251 fatal cases of cholera out of 445 persons attacked in Spain. In the provence of Valencia the greatest number of cases (144) and deaths (85) occurred in Puebla de Rugat, where the first outbreak took place. The epidemic has totally disappeared from there now. From Rugat the cholera traveled down the little river that flows from that place to the sea, cases occurring in places situated below Rugat on the river, and in some villages to which it seems to have been carried by fugitives from Rugat.

Rescued by an Undertaker.—The druggist is saved, though the patient is dead. By a mistake of a druggist in Brooklyn recently, an overdose of hyoscyamine was administered to a patient with fatal result. Later, a coroner's inquest was held, but in the meantime, the undertaker had subjected the body of the deceased to an embalming process, which destroyed all traces of the poison. The druggist is still held in bonds of $2,000, but evidently conviction will be impossible. The need of special legislation upon this point is clearly manifest.—*J. A. M. A.*

Fracture of a Rib from Coughing.—Mr. E. C. Masser reports in the *Brit. Med. Jour.* for April 26, 1890, the case of a man, æt. 54 years, who was suffering from bronchitis and Bright's disease. One evening he sent for the reporter, saying that he had a great pain in his side. Upon inquiry it was ascertained that during a violent fit of coughing he had heard a snap, and had since felt a sharp pain in the same spot. Examination revealed the presence of a fracture of the rib. This healed as readily as could be expected in a man with bronchitis, and there were no signs pointing to any previous disease of the rib which would render it specially brittle.—*Med. Rec.*

A Rare Case of Lactation.—Dr. Neumann of Krotoschin, reports a very peculiar case (*Deut. Med. Zeit.*) of a boy æt. 3 weeks, whose right mammary gland was much larger than the left; on pressing it a strong stream of milky fluid spurted forth to some distance, as in the case of any robust nursing woman. The fluid was shown to be milk. The child was not well attended to, and the constantly exuding fluid had caused a pustular eruption about the nipple and breast. The child was otherwise normal. It is not very unusual to be able to express a somewhat milky fluid from the breasts of young infants, but cases are certainly rare in which the milk is secreted in such abundance.

Midwives and Puerperal Fever.—*Lyons Medicale* details an interesting trial which recently occurred in Lyons. During the month of February rumors began to be noised about concerning the unfortunate results which Madame C., a midwife, encountered in her profession. Numerous women had died under her care, and serious charges were made against her ability and care-

fulness. An investigation was set on foot, which resulted in the arrest of the woman. It was found that seven women had died in her charge from the beginning of January to the 19th of February. Experts were called to the stand, and testified that the only factors in the transference of the puerperal contagion were the carelessness and uncleanliness of Madame C., and that she alone was responsible for the death of the seven women referred to. The woman was sentenced to a fine of 50 fr., and imprisonment for six months. This is an excellent example, and if followed up would cause a great reform in the methods of many midwives.

Congenital Defect of the Pectoral Muscles.—Dr. Benario reports a case of congenital absence of the pectoral muscles on one side of the chest which was observed in Professor Brieger's clinic. The subject of the deformity was a man, æt. 20 years. On the right half of his chest in front the skin lay close upon the ribs, the pectoral muscle being altogether absent. Between the chest and arm there was felt beneath the skin a peculiar membranous extension, called by the author "flughautbildung;" also "schwimmhautbildung." There was slight right convex scoliosis. The right upper limb was shorter than its fellow (4 ctm.). Electrical examination proved that the condition was congenital, and not due to juvenile atrophy. Thirty cases of a similar nature were found recorded in the literature, 24 with absence of the pectoralis major, 6 with absence of the pectoralis minor and major together.—*Medical Recorder.*

Physicians Who Gave up Medicine and Succeeded in Finance.—The New York *Star* mentions three physicians of that city who have forsaken the path of medicine for the thornier one of financial speculation, and, strange to say, all of them with marked success so far as the attainment of wealth. One is Dr. J. H. Parker, just elected vice-president of the Park National Bank, who made the first step toward his fortune, estimated as in the millions, from cotton speculation, having formerly been a medical practitioner in Charleston, S. C. The second is Jesse Seligman, of Seligman Brothers, who was about to hang out his sign as a doctor in San Francisco during the gold excitement of 1848–49, but drifted into the banking business instead. The third is Dr. Norvin Green, president of the Western Union Telegraph Company, who came from Kentucky, and at one time made a specialty of lung diseases.—*Boston Med. and Surg. Jour.*

Fatal Hæmorrhage from Laceration of the Vulva.—Dr. Drzmalik has noted, in the *Wien. klin. Woch.*, a case of great medico-legal interest. The patient was a woman, æt. 24 years, in the eighth month of her first pregnancy. She was seized with faintness in the hall of a house, leant against the wall for support, but gradually slipped down on to the ground with her thighs extended. She was picked up unconscious and bleeding, and soon died. No trace of violonce could be found on the body. The thorax was not opened. The uterus was found enlarged to the usual degree at the eighth month of pregnancy. It contained twins, with distinct placentæ inserted high up on the side of the uterine wall. The cervix was plugged with mucus. Immediately above the meatus urinarius was an angular laceration, the meatus lying close to the apex of the angle. There was no trace of any other injury. Dr. Drzmalik felt confident that the wound was the source of hæmorrhage, and of this there could be little doubt. He further was satisfied that the wound was caused by sudden and extreme abduction of the thighs.—*Brit. Med. Jour.*

Relics of Barbarism in the German Universities.—With all their learning and teaching power, the German universities retain some rather unlovely traditions, of which duelling is perhaps the most redolent of barbarism. True, the vast majority of "hostile meetings" between undergraduates seldom result in more than facial disfigurement; but sometimes, when firearms are the weapons chosen instead of swords, danger is inevitable, and even death may occur. A melancholy illustration of this has lately been witnessed at Wurzburg, where a highly promising and amiable "candidatus medicus" lost his life. Paul Fleurer, the unfortunate youth in question, seems to have played a truly chivalrous part in the encounter; for after a first, and then a second interchange of shots, he held out his hand twice in token of reconciliation with his antagonist, but in vain. A third interchange was insisted on, and poor Fleurer fell mortally wounded, and died in a few minutes. At his funeral, which was attended by the students in large numbers, and with all the insignia of mourning, *oraisons funebres* were delivered, the principal of which referred to the deceased as the victim of an "unfortunately still prevailing prejudice"—surely an inadequate condemnation of a practice which finds no favor in the better-mannered academic life of Great Britain and America.—*Lancet.*

Death Under A. C. E. Mixture.—The death of a lady, æt. 36 years, whilst under the action of an anæsthetic (the A. C. E. mixture) was the subject of an inquest reported in the *Beckenham Journal.* She was under the care of Dr. Barton, and the anæsthetic was administered by Dr. Nash. According to the evidence given by Dr. Barton at the inquest, the patient was suffering from retroversion and incarceration of the pregnant uterus, with retention of urine. The heart on examination appeared to be perfectly sound. After the administration to the deceased of a little brandy and water, Dr. Nash commenced to administer the anæsthetic. In about eight or nine minutes the deceased entered the first stage of anæsthesia. The breathing soon became irregular, she gave three or four gasps, and then the breathing stopped. Previously there had been no symptom of vomiting or any diffi-

culty of respiration; the pulse remained perfectly steady and regular. Dr. J. T. C. Nash said immediately he noticed a change in the respiration he suspended the use of the anæsthetic, and without delay resorted to artificial respiration.He had administered an anæsthetic many times before, but never more cautiously. He gave a larger amount of atmospheric air than was usual. The administration did not last ten minutes, and the total quantity administered did not exceed 2 drachms. Dr. J. M. Sturges, who performed the post-mortem examination, found the body well nourished, and all the organs free from disease. The heart had acted to the last. He considered the cause of death was misadventure in anæsthesia. Dr. Barton had taken a perfectly right course. A verdict in accordance with this opinion was returned.—*Br. Med. Journal.*

CORRESPONDENCE.

"TRAPPED."

KANSAS CITY, Mo., Aug. 3, 1890.

EDITOR REVIEW:—Under the above caption there appears in the St. Louis *Med. and Surg. Jour.*, a criticism of my article on Eczema Spongois which appeared in the REVIEW recently.

The sincerity and reliability of my report is impugned, the exceptions being based principally on the fact that a slide which I sent (by mistake, by the way) showed spermatozoa instead of the micro-organisms which I had figured and described in the paper.

While I must admit that there is great disparity between spermatozoa and the organisms pictured, it seems to me that this very fact would have suggested the idea of a mistake somewhere, and it seems that this did suggest itelf to the honorable editor in question, who even went so far as to write and ask me if I had procured the specimens with my own hands or had left this work to others; never so much as hinting, however, as to the nature of the contents of the slide which he received.

Naturally I answered I had procured the specimens myself. He at once sent me the enclosed letter, in itself a beautiful exponent of ingenuousness, sincerity and honesty, giving, as it does, reasons for declining to publish the paper totally different from those which appear later in his editorial:

ST. LOUIS, Mo., Dec. 6, 1889.

DR. W. F. WILKINS,
1907 Holmes St.,
Kansas City, Mo.

DEAR DOCTOR:—Agreeably to your request I herewith enclose to you your article on Eczema Spongois. I do this because I feel that I have no right to retain it longer and thus prevent its publication at an earlier date than could be reached in the *Journal.* We had a very large lot of original contributions on hand when it came, and these had to be used in rotation. If you give it to some other journal send me a copy of the latter and I will abstract and comment on the same.

Respectfully, FRANK L. JAMES.

Truly a generous, candid and open manner of treatment toward me! This I take to be as unfair a course as could well be devised, and his own article shows it to be premeditated; a beautiful and honorable (?) scheme was concocted to entrap a brother practitioner, and that, too, without giving him an opportunity to refute the suspicion which an accident had cast on his work.

How natural to suppose that anyone laying any claims at all to sanity would try to palm off on a professional microscopist, spermatozoids for micro-organisms!

The spermatozoa were in all probability substituted in this way: On the morning that I sent the slide to the *Journal*, Dr. Banker, Chas. Beznason and some others were in the office examining the exudate and comparing it with dust from the sponge busket, spermatozoids and other specimens. I was busy at the time and when at leisure took the slide from under the microscope and mailed it to Dr. James, thinking, of course, that the gentlemen were looking at the eczematous exudate. Had he then been fair and candid enough to tell me what he had found, an explanation from me would have straightened matters without the unpleasant consequences to which his action led.

But the "scheme" in which so much pride is taken must prove abortive in that the presumption of irregularity on my part is unfounded. Gentlemen of veracity and physicians of reputation, residents of Ottawa, will, if need be, substantiate every word of my paper, and I can furnish slides for the inspection of any who may desire to investigate for themselves. The experiments were conducted in an incorporated institution of Ottawa, Kas., with the assistance of, and in conjunction with, the members of that institution. It was because of our refusal to admit some men who were not recognized by the regular profession, that the false and malicious information was furnished Dr. James.

My theory and claims as to the cause of this form of eczema are supported by experimentation, microscopic investigation, and the legitimate results of my treatment.

Regretting the necessity which calls for this further encroachment on your columns,

I am, yours fraternally,
W. F. WILKINS.

IT WAS DIPHTHERIA THAT KILLED THEM IN MONTMORENCY AND OTSEGO COUNTIES.

Office of the State Board of Health, } LANSING, MICH., July 22, 1890.

EDITOR REVIEW:—The outbreak of dangerous disease which has prevailed in Otsego and Montmorency

Counties since last spring, and which local physicians said was not diphtheria, and permitted two of the corpses to be sent to Lapeer County, where a case of diphtheria occurred in a person who viewed the remains, has been investigated by the State Board of Health, the investigation having been requested by a union meeting of the boards of health of three townships in those counties.

Prof. Vaughn, of the University, a member of the State Board of Health, went and made the investigation. He has also made bacteriological examinations of the membrane from the throats of two of the patients, and has found and propagated the micro-organisms which are believed to cause diphtheria. This species of micro-organism is known as Loeffler's bacillus. Prof. Vaughn says: "The bacilli have been compared with the Loeffler bacillus which I had obtained in the laboratory of Dr. Koch at Berlin, and the identity of the two cannot be questioned." He reports the disease to be unmistakably diphtheria, as proved by symptoms, physical signs, throat paralysis, etc.; and the diagnosis is sustained by the bacteriological examination. It is now hoped and expected that the local authorities will take thorough measures and stamp out the disease.

HENRY B. BAKER, Secretary.

SOCIETY PROCEEDINGS.

TRANSACTIONS OF THE GYNÆCOLOGICAL SOCIETY OF CHICAGO.

[CONCLUDED.]

DR. W. W. JAGGARD.—Apart from any personal feeling, as a Chicago physician I am very proud of Dr. Parkes and his record. I think it is one of the most remarkable papers I have ever had the pleasure of hearing. I think, too, Dr. Parkes must be accorded priority in establishing in this country the method of operating before a large class. It is not the same to operate before five or six or twenty-five as before a class of five hundred men. Dr. McLean, in Ann Arbor, did not do this thing; that was before the days of antiseptic surgery. Here we have an antiseptic surgeon, a man who has adopted modern methods, avowing his belief in the importance of contact infection.

Again, it is a remarkable fact that such an immense amount of material could be gathered together in any one clinic. I do not think there is another clinic in the country that has produced such an amount of material, and I am not aware of any on the Continent of Europe, unless it be that of Billroth in Vienna; and during my term of two years there I saw no such material as is described by Dr. Parkes.

While the paper is a strong argument for contact infection, it is by no means a demonstration. There are cases that arise—not from air infection (air infection undoubtedly plays a very subordinate role, Kummel and others showed that conclusively five or six years ago)—but there is a mode of infection called self-infection, in which the woman actually infects herself; in which her unclean skin or dirty fingers, or micro-organisms lodged about the pubic hair or in the vaginal or cervical secretions, will produce infection. It is not only important that subjective antisepsis receive careful attention, but it is also important that objective antisepsis be attended to; there should be absolute sterilization of the fied of operation. The term of self-infection is not well chosen, and a few months ago Dr. Holmes criticised me on that point severely and justly. The term is a misnomer, but until we have some better word to express the idea of objective infection I think we should retain this term.

In puerperal fever it is necessary to recognize two methods of infection: contact infection, 99 out of 100; self-infection, 1 out of 100.

As regards the individual cases, I was particularly interested in the case of menstrual epilepsy, and I had hoped to hear some remarks on the subject from Dr. Church. I have been looking up this matter somewhat in detail. I have three or four cases of epilepsy under observation in which the menstrual epoch seems to sustain some relation to the epilepsy, and I have about made up my mind to perform oophorectomy in one case. My observations of Dr. Goodell's cases in Philadelphia did not favor the operation. And in the case reported by Dr. Parkes, the period of time that has elapsed since the operation is too brief to enable one to make any positive deduction. But it is one of the clearest cases of which I have knowledge.

The case of removal of kidney in pregnancy is of uncommon interest, particularly to the obstetrician, and sustains a recent doctrine that it does not make much difference what organ you take out above the level of the fundus or above the lower uterine segment, so long as you leave the uterine cavity intact. On the other hand, a slight operation on the vulva or lower part of the vagina or uterus is apt to be followed by interruption of the pregnancy.

Not at all in the way of criticism, but for information I would like to inquire concerning the indication for operation in the case of enlargement of the ovary, the size of the tumor, and the reason for removing it. Ovaries do come under one's observation that are slightly enlarged. I have a case under observation now in which one ovary is nearly as large as my fist, but perfectly mobile, and productive of no symptoms.

DR. ARCHIBALD CHURCH.—Mr. President: I came here this evening by chance invitation, and had no idea of taking up the time of the gentlemen, but I am glad to say a few words in regard to the case Dr Jaggard has particularly mentioned—a case of epilepsy apparently due to derangement of the function of menstruation. This strikes me as being of great interest, and I cannot recall any instance which points out more clearly the relation which sometimes is to be found between neuroses of a functional sort, like epilepsy, and peripheral irritation. There is no question in my mind that in the

case cited the indications for operation were clear and imperative, and under similar circumstances I think any one would be justified in proceeding surgically in this form of epilepsy. As Dr. Jaggard has said, however, the time is as yet too short to decide as to the real value of the operation in this particular instance, though it certainly promises to be a cure. I did not understand whether the operation had resulted in causing cessation of menstruation or not, or whether there was yet a discharge of blood. Certainly the periodical susceptibility does recur, as there is a tendency to disturbance of the nervous system at intervals corresponding to the menstrual epochs. But if the menstruation still exists in spite of the removal of the ovaries, the question might arise as to whether removal of the uterus and tubes would also be indicated, and whether Pean is justified in the extensive operation he does in these cases.

I have seen two cases of epilepsy which were associated with the menstrual function, coming on very much as in this patient, but in which the convulsions were not limited so completely to the menstrual epoch, and both of which terminated favorably with the menopause; but this cannot be anticipated as a rule. In my mind there is no question of the ability of irritation, ovarian or uterine, or in the tubes, to produce epilepsy. Nor is there any question, in my estimation, of the advisability of operation in clearly marked cases.

Dr. J. H. Etheridge.—It seems to me, in view of the fact that most of us remember the tremendously particular preparations made ten or twelve years ago—spraying the room, using antiseptic precautions, etc.—as compared with the simplicity of the present method, it would be well for the speaker of the evening to detail a little *in extenso* the technique of the operations he has done and the preparations for them.

Dr. Parkes.—In rising to close the discussion, I would express my thanks for the favorable manner in which this paper has been received. My friend Dr. Byford still will persist in saying that ovarian tumors united to the rectum and other parts of the abdomen are difficult cases, and I am glad to agree with him. My proposition is that a simple, unattached ovarian cyst is the simplest operation I have ever had anything to do with.

I hope Dr. Lee has not received the impression that I wished to assert that I was the originator and the only man to operate before bodies of men, but merely that operation before a general class is, so far as my acquaintance with other cities in this country are concerned, an innovation. I have seen the operation done many times in the presence of a good many men, but I have never seen it done in the presence of a large class—from 400 to 500 students—and I know there are few institutions where it is done as a regular thing, done just the same as an abscess is opened or any surgical operation is performed.

I am very glad indeed that two of the gentlemen have suggested that I should state what I believe in reference to the technique of these operations. They are not simple at all, but are the most rigorous preparations that can be made. I am especially pleased to have the point of self-infection referred to by Dr. Jaggard, because just as much care is taken with every one of these patients as was ever taken for operation in a private room. It is my rule, from which I seldom depart, to have the patient under my close inspection and control three days before the operation, and during that time I try to disinfect the intestinal tract as possibly a source of self-infection. The patient is given freely of cathartics, and the intestines are emptied out entirely in every way by injections until the abdomen is as flat as it can be made, and by this means the intestines are kept out of the way during the operation, which is very important. Every operator knows that when the intestines are full or distended with gas it is the most troublesome thing in the world to get them out of the way. The patient is put in bed and kept in bed, and I think that is important. She is given a full bath of the entire body the first day before going to bed, and when she goes to bed all the hairy surfaces are shaven close, and then a special wash is given over the abdomen and genitalia; this consists of three or four washes with soap and water, particular attention being paid to the umbilicus. This is very important and should be done regularly. The line of the incision is washed with ether, and there is applied to the surface of the abdomen, the night before the operation, a compress of 2½ per-cent solution of carbolic acid covered with an impervious dressing, and this is left on until the abdomen is uncovered for the operation. Not only is that done, but the vagina also is prepared with the bichloride douche, which is followed by one of sterilized water.

The vagina is irrigated, not only for the purpose of getting rid of anything that may be a source of infection through the vagina or vulva, but to prepare it for interference if necessary to enter it for any purpose during the operation. The instruments are all especially prepared. I believe in having a large number of them at hand, so as to be prepared for anything. The instruments are prepared by being boiled thoroughly in water until everything is dead. They are prepared each time and are used for nothing else; that is another thing—I do not think these instruments should be used for all sorts of operations. I have the same assistants—with the exception of the interne, who is always an assistant—about the case, and they are trained in the preparation of themselves, which consists in their washing with soap and water and scrubbing brush, then with antiseptic solutions, then with soap and water, afterwards covering the clothing with a gown so that the clothing is not brought into contact with the patient at the time of operation. The patient is wound with blankets passing about the shoulders and legs, leaving exposed to view only the surface of the abdomen. All these parts are covered with clean dry towels first, then by towels wet in a 2½-per-cent solution of carbolic acid. I do not believe the wet towel should be brought in contact with the patient's body, as I think it increases the

shock. You know it is a personal matter with me to prepare the patient as to shock. I believe quinine and morphine are of benefit, so all my patients receive five grains of quinine and one-quarter of a grain of morphine.

I was glad to hear Dr. Holmes speak of the incision. I believe in a small incision and I believe in a large one. I believe when one gets accustomed to working he can do the work through a small incision, put a novice will need a large incision. Another thing of importance is that the peritoneum should not be disturbed much; the intestines should always be kept well out of the way and never allowed to come into the wound, if possible to avoid it—and in the majority of cases it is possible—and the field of operation is perfectly under the control of the operator. I believe that adhesions should never be torn or severed until they can be seen. I think a great deal of the bleeding that bothers surgeons comes from the fact that they cannot see what they are doing.

I believe I have gone over *in extenso* all I can say. Of course, the silks, the sponges, and everything else that is used should be prepared according to the best rules that are given with reference to making them perfectly aseptic. I never allow an assistant to but his hands or an instrument into the peritoneal cavity unless I direct him to do so; I keep everything out of the peritoneal cavity as far as possible. It is proper for me to say that no antiseptic solutions are ever introduced into the peritoneal cavity, even when pus is present, other than sterilized water or a mild solution of boric acid.

SOCIETY NEWS.

AMERICAN DERMATOLOGICAL ASSOCIATION.

Programme of the Fourth Annual Meeting, to be held at Richfield Springs N. Y. Sept. 2, 3, and 4, 1890.

Officers for 1890.—President, Prince A. Morrow, M.D., New York; Vice-President, George H. Tilden, M.D., Boston; Secretary and Treasurer, George Thomas Jackson, M.D., New York:

The meetings of the Association will be held in the Parlors of the Spring House.

FIRST DAY.

Business Meeting (with closed doors) at 9.30 A.M.
Report of Council.
Nomination of Officers for the ensuing year.
Appointment of Auditing Committee.
Proposals for Active and Honorary Membership.
Miscellaneous Business.
Address by the President, Dr. P. A. Morrow.
Observations on Prurigo, Clinical and Pathological, Dr. R. W. Taylor.
Prurigo in the Negro, Dr. R. B. Morrison.
A Clinical Study of Pruritus Hiemalis—Winter Itch, Frost Itch, etc., Dr. W. T. Corlett.
A Study on Pruritus, Dr. E. B. Bronson.
Note relative to a case, probably, of "Cancer en cuirasse," Dr. J. N. Hyde.
A Case of Atrophia Maculosa et Striata following Typhoid Fever, Dr. F. J. Shephard.
Electrolysis in the Treatment of Lupus Vulgaris, Dr. G. T. Jackson.

SECOND DAY.

Report of Treasurer and Auditing Committee.
Election of Officers.
Election of Active and Honorary Members.
Selection of Time and Place of next Meeting.
Miscellaneous Business.
Report of Committee on Statistics.
Report of Committee on Nomenclature.
Immigrant Dermatoses, Dr. J. C. White.
Notes on some Rare Cases, Dr. G. H. Fox.
Cases of Cutaneous Tuberculosis, with Histological Studies, Dr. J. T. Bowen.
Cases from the Hopkins Hospital Clinics, Dr. R. B. Morrison.
Plica, Dr. H. W. Stelwagon.
Treatment of Erysipelas, Dr. C. W. Allen.

THIRD DAY.

Remarks on the Treatment of Dermatitis Herpetiformis, Dr. L. A. Duhring.
Treatment of Ringworm and Favus of the Scalp, Dr. H. W. Stelwagon.
Notes on Pilocarpine in Dermatology, Dr. H. G. Klotz.
Report on Aristol, Dr. C. W. Allen.
Retirement of old and induction of newly elected officers.

The weather permitting, the following excursions will be taken:

After the adjournment on Tuesday, a drive around Canadarago.

After dinner on Wednesday, a coaching and steamer trip to Cooperstown.

SELECTIONS.

TENOTOMY TO INCREASE THE MOBILITY AND POWER OF THE MUSICIAN'S RING-FINGER.

Considerable attention having been lately attracted to the above subject we subjoin extracts from a paper by Dr. F. W. Langdon, in the Cincinnati *Lancet-Clinic*, for July 5, 1890:

"The limited range of independent extension possessed by the fourth digit of the hand is well known, and is usually a most formidable stumbling-block to the pianist and other performers on keyed and stringed instruments, in the production of certain notes and musical effects, as trills for example.

"The causes of this impairment of mobility, which is associated with a corresponding lack of power in the digit, are two in number, namely: 1, mechanical, due to structural peculiarities of the parts; and 2, physiological, due to insufficiency of muscular development; the latter being dependent on the former.

"The mechanical obstacles to free extension, as any one may satisfy himself by dissection, or even by examination of the average living hand, are two oblique tendinous bands, situated about three-quarters of an inch above the knuckle line, connected proximally with the extensor tendon of the ring-finger, and distally with the common extensor tendons on either side, namely, those to the middle and little fingers.

"That these subsidiary tendons act as 'guy ropes,' and limit the extensor range of the ring-finger especially, may be determined by any one for himself, by placing the hand on a flat surface and extending, first, the ring-finger alone; then extension of its neighbors on either side will demonstrate that all three can be brought higher than either one alone. The little finger is seen to be less affected than either of the others, owing to its possession of a proper extensor, which is free, while the middle finger is less limited than the ring, by reason of having the 'guy' tendon on one side only.

"These diagonal tendinous bands are constantly present, though varying somewhat in development and position in different persons.

"Not only is extension of the ring-finger diminished, but separation of the three inner digits is materially lessened by the presence of these apparently insignificant slips, so that the lateral spread of the digits is impaired to such a degree as to become an important matter to the musician. Again, in addition to the mere limited range of motion, both vertically and laterally, due to the mechanical effects of these slips, there is also to be considered the physiological factor, namely, lessened functional activity and consequently faulty development of the muscular fibers acting on the extensor tendon of the ring-finger, namely, fibers of the common extensor, fourth dorsal interosseous and third lumbricalis. This fault of development is a more important matter than would appear at first glance, since it is mainly by the interossei and lumbricales that the first phalanges are flexed and the second and third extended, whence the name 'fidicinales'."

The performance of the operation in one case is thus described. "The field of operation was prepared by thorough cleansing. The skin, with a large branch of the dorsal venous arch, was now slipped aside with the thumb, so as to leave clear of vessels the interspace between the third and fourth metacarpals in the neighborhood of the proposed incision. Moderate flexion of the patient's hand enabled the operator's finger to define the position and direction of the outer (radial) connecting slip, which varies slightly in different subjects, its middle averaging perhaps three-quarters of an inch above the knuckle line. With an ordinary sharp-pointed tenotomy knife a longitudinal incision, one-eighth inch in length, midway between the third and fourth metacarpals, and just to the distal side of the slip to be divided, is carried through the skin and superficial fascia. The exact location of the slip having now been determined by means of a probe—the deep fascia is incised at the lower edge of the slip and the point of the knife carried directly upward, that is, toward the wrist, beneath the slip, which parts with the characteristic creaking sound and feel. If not sufficiently tense to divide easily, it may be made more resistant by directing the patient to flex the fingers a little more strongly. The dressing consisted of a pledget of absorbent cotton held in place by adhesive strapping.

"A marked increase in range of independent extension was at once evident, and within a few days the patient remarked a greater precision of touch—there being no tendency to the lateral twisting which had before annoyed him—and which was at this time observable in the other hand. Union of the wound was complete when the dressing was removed on the third day, and the result of the operation was so satisfactory to the patient that he at once submitted the other hand to be operated on. The motion attained in both cases was so satisfactory that it was deemed unnecessary to divide the slip going to the little finger tendon. In some extreme cases, however, this also would probably require division, in which event it would be well to bear in mind its lesser length, and not mistake for it the common extensor tendon, going to the fifth digit."—*Boston Med. and Surg. Jour.*

THE INNERVATION OF THE STOMACH.

Two Russian observers have recently undertaken a series of elaborate experiments tending to elucidate the question of gastric innervation. A summary of their conclusions is given by the *Lond. Med. Rec.*, as follows:

1. Normal movements of the stomach attain their maximum intensity during the gastric digestion, that is, when the organ is filled up with food masses. When the organ is empty, its movements not unfrequently cease altogether.

2. Given an active period, there are usually observed more or less strong rhythmic contractions of the pyloric portion of the organ, which occur at a fairly regular rate. The cardiac portion of the stomach may frequently remain at rest. It commences to perform periodic contractions only when the active period reaches its height, the contractions being more slow in comparison with the pyloric ones. They are not strictly synchronous with the latter; not unfrequently the movements of the cardia coincide with relaxation of the pylorus, and relaxation of the cardia with pyloric contractions.

3. At the height of the gastric action, there are observed, in addition, fairly strong general contractions

of the gastric walls, running from the cardia toward the pylorus. They may sometimes occur even in such cases where the pyloric contractions are weak or absent altogether.

4. The pyloric movements are mainly dependent upon a peripheral or local nerve apparatus, since they may still occur, even after both of the vagi and the cervical portion of the spinal cord have been divided.

5. They are, however, kept up and even excited by the agency of the vagi, since division of the latter alone may prove sufficient to cause a complete cessation, or at least a more or less considerable weakening, of the rhythmic movements.

6. On the other hand, destruction of certain portions of the central nervous system (*e.g.*, corpus quadrigeminum) similarly gives rise to a more or less prolonged stoppage of the pyloric contractions, which, however, after some while, regain their former intensity.

7. Stimulation of the vagi is invariably followed by very strong and accelerated rhythmic contractions of the pyloric region. Irritation of the right pneumogastric nerve always produces more pronounced effects than that of the left one.

8. Stimulation of the vagi never brings about a continuous restriction of the region; hence the supposition is justified that the nerves act on the region through stimulating a local peripheral nerve-apparatus.

9. As regards the cardia, strong electric and even mechanical stimulations of the vagi invariably produce a general contraction and constriction of the region, while a slight electric irritation gives rise to a more or less marked dilatation of the part, the pylorus showing no changes at the time. (In other words, the authors confirm Openkhovsky's observations, according to which the vagi contain cardio-dilating fibres.)

10. When the stomach is empty, stimulation of the vagi manifests a by far weaker influence on the organ than during the period of digestion.

11. An increased frequency of the pyloric rhythmic contractions is also observed on electric stimulations of the medulla oblongata.

12. Stimulation of the splanchnic nerves invariably completely arrests the pyloric movements (that is, the nerves contain special pyloro-inhibitory fibres, as Openkhovsky has shown), and at the same time induced a prolonged, though weak, single contraction of the organ, spreading from the cardia to the pylorus.

13. The same effects are also obtained from stimulating the spinal cord (its upper part), medulla oblongata, cerebral pedunculi, and anterior segment of the optic thalamus. The latter contains special centres inhibiting the pyloric movements.

14. Stimulation of the sigmoid gyrus (especially of its postero-external, but partly also of the anterior portion) increases the pyloric contractions, the increase being often accompanied by a general constriction of the region, and followed by some decrease, or even temporary complete arrest of the movements. Now and then the same effects may be also obtained from stimulating the second gyrus, in the neighborhood of the sigmoid, and the third or fourth ones, between the upper end of the Sylvian fissure and the postero-external division of the sigmoid gyrus.

15. Stimulation of the anterior part of the sigmoid gyrus, and sometimes of the outer end of the cruciate one, as well as of the posterior division of the sigmoid and adjacent part of the second primary gyrus gives rise to a more or less prolonged retardation, or a complete inhibition of the pyloric contractions, accompanied by a general constriction of the region, and followed by increased movements.

16. Stimulation of the antero-external division of the sigmoid gyrus may occasionall give rise to contractions of the cardia without producing any changes about the pylorus; while irritation of the posterior end of the same gyrus may sometimes call forth contractions of the cardia, accompanied by increased pyloric movements.

17. As to a reflex influence of peripheral stimulation, it has usually an inhibitory character. With regard to the energy of the action, the peritoneal coat of the intestines and the peritoneum in general must be placed foremost. Even a slightest stimulation of the parts, such as a gentle stroking with a finger, very rapidly brings about a total and more or less prolonged arrest of all pyloric movements. Similarly, any cutaneous stimulation (pathic or thermic) gives rise to a temporary decrease or stoppage of all gastric contractions. The same holds true in regard to rhythmic contractions of the small bowel.

18. Stimulation of the central end of a divided vagus produces a temporary arrest of the pyloric rhythmic movements, accompanied by a general contraction of the gastric fundus, and a quite distinct dilatation of the cardia.—*Med. Rec.*

ETIOLOGY AND TREATMENT OF INSOMNIA IN CHILDREN.

Simon (*Rev. mens. des de l'Mal Enf.*, May, 1890). The treatment of insomnia will depend upon the ageof the child when it is due to digestive trouble. The condition may be the result of too frequent nursing, to improper physical condition of the mother, or to some peculiarity about her milk. With bottle-fed children the insomnia may be traced to the bottle or its contents. Should the insomnia continue after these precautions have been taken, a teaspoonful of lime-water or of Vals water may be given between consecutive nursings, and, as a laxative, a teaspoonful of syrup of chicory, or a pinch of magnesia in sweetened water. If insomnia is due to premature weaning it will usually disappear if the child is restored to the breast. If weaning has occurred at the proper time the regulation of the diet will go far toward relieving any tendency to insomnia. When insomnia is dependent on indigestion in children two years

of age and upward, a dose of wine of rhubarb or of wine of pepsin at suitable intervals is indicated. To children five or six years of age give a few drops of the following mixture:

℞.	Tinct. quinquinæ -	5.00 grammes.
	" rhei - - -	2.00 "
	" calumbæ - - -	2.00 "
	" nucis vom. - -	0.50 gramme.

All food should be well cooked, and should be finely divided if there be any suspicion that it will not be well masticated.

Insomnia may be attributable to nervous disorders, which may be divided, in this connection, into several groups. The first group would include cerebral sclerosis, chronic hydrocephalus, cerebral tumors, bony lesions, with abscess of the brain. For insomnia from cerebral sclerosis, bromide of potash may be given until relief is obtained, either with or without the iodide. Should this be unavailing, valerian or chloral may be given, with calomel as a laxative. Similar treatment will be suitable with cerebral tumor, or chronic hydrocephalus, but not with cerebral abscess. The insomnia with the latter condition will continue until the pus is evacuated by suitable trepanation. The second group from which insomnia may result includes acute congestion, incipient meningitis, and cerebral irritation. With acute congestion, one should use mild revulsive agents, and, in addition, quinine, aconite, the bromides, and calomel. With incipient meningitis revulsives are also indicated behind the ear or at the nucha. With cerebral irritation, the bromides and chloral will prove beneficial, the latter being given by the rectum. For insomnia with headache, in growing children and those who droop under the confinement of school, a course of bitter tonics, gymnastics, lukewarm baths, and diminution of the hours of study, should be advised. With the neuralgias and chorea, the insomnia may be antagonized by suitable doses of antipyrine. If a child is hysterical, iron, valerian, asafœtida, and warm baths, should be used the same as if no insomnia existed. With epilepsy, if the bromides are ineffectual, strychnine and belladonna should be tried. With all the foregoing conditions galvanization of the head will prove most beneficial in adults, but from the anatomical peculiarities of the case, if it is used in children, the current must be very weak, and not employed more than half a minute at a time. Static electricity is not open to the same objection, and gives admirable results if the insomnia proceeds from chorea, hysteria, headache, gastro-intestinal disorder, or disturbed mental balance. When insomnia is due to pain, as in Pott's disease, coxalgia, white swelling, etc., large doses of quinine will sometimes afford relief. If due to the fevers, opiates must be given, but very gradually, for their depressant action must be remembered, and also the fact that they lock up the secretions. With influenza, quinine or antipyrine will relieve insomnia, and with the rheumatic diathesis the same drugs with the addition of salicylate of soda.—*Am. Jour. Med. Sc.*

ADMINISTRATION OF CREASOTE IN PHTHISIS.

Dr. Alfred Eichler says, in the *Druggists' Circular*, June, 1890, that creasote is perhaps more prescribed now than at any time since it was first used in medicine. The medical profession the world over began some time ago to again use creasote as a remedy against the ravages of the bacillus tuberculosis, a fact well known to those of our pharmacists who enjoy a large prescription business. It has probably been noticed by many observers that it is quite a difficult matter to disguise the sharp and pungent taste as well as the objectionable smell of creasote, effectively, frequently a matter of importance to the physician, it being only too often the case that consumptive patients are very fastidious regarding their medicines on account of the stomach rebelling quickly against nauseous drugs.

A formula much in use is the following, originated by Bouchard, Paris:

℞	Creasote - - - -	13,5 grams.
	Tincture of gentian - -	30.0 grams.
	Alcohol - - -	250.0 grams.
	Malaga wine sufficient to make - -	1,000.0 grams.

This combines the restorative effect of alcoholic stimulants with the antisepsis of creasote; unfortunately, the taste of creasote is much too prominent in this mixture for it to be agreeable to delicate patients. While it often may be convenient to combine the stimulants necessary to a patient with his medicine proper, I think that in this instance it will be better to leave out of the combination all spirits, as they only seem to diffuse the the pungent taste of creasote. This pungency cannot be effaced by the addition of glycerin, bitters, or other substances usually combined with liquors.

The ordinary prescription of many physicians, and a very good one at that, because possessing the effects of the two at present acknowledged best remedies for phthisis, consists in giving creasote with pure cod-liver oil, an addition which largely obliterates the taste of creasote, but introduces cod-liver oil, in itself objectionable to many. However, this may be remedied by emulsifying the oil. A better plan still and one which has been found to be quite effective, is to add to the finished emulsion of creasote and cod-liver oil, well flavored with some essence, a quantity of extract of malt, either the officinal or any of the thick extracts in the market, and also to add about two ounces of bitter almond water to each pint of the product. Thus we will have a liquid preparation which can easily be poured in and out of a narrow-mouthed vial. It would be represented by the following prescription:

℞	Creasote - - - - - -	ʒss.
	Extract of malt - - - -	℥iv.
	Bitter almond water - - -	℥ij.
	Emulsion of cod-liver oil (50%) -	℥x.

Dose: One or two tablespoonfuls three times a day, after meals.

This form has been found to be an excellent and

pleasant remedy, combining the effects of creasote and cod-liver oil, aiding digestion by means of the malt, and the almond water exerting a slight sedative influence upon the bronchial mucous membrane. The usual flavor for the above emulsion consists of the oils of orange, bitter almond and wintergreen.

Advantage may be taken of the fact that creasote can be completely disguised with oil of peppermint. One drop of creasote mixed with 30 grains of the oleosaccharate of peppermint of the *German Pharmacopœia* can readily be taken. This could be compressed into a pill or tablet. It is preferable, however, to prepare a mass with gum tragacanth and sugar, suitably flavored with oil of peppermint, and then to divide this mass into troches.

Mackenzie's formula for carbolic acid troches (*U. S. Dispensatory*, p. 1542,) may be utilized by substituting creasote for carbolic acid, flavoring the mass with pep permint, and dividing the same into troches or tablets of any size.

Capsules of creasote often prove of service; they can be dispensed and made up with any ordinary excipients. Creasote and cod-liver oil can be introduced into gelatin capsules and will keep for a long time. Quite often it will happen, however, that eructations and after-taste will follow their use and defeat the object.

Pills of creasote, when properly prepared, perhaps present the easiest method of administration. An especially good formula is the one combining balsam of tolu with creasote, as follows:

℞ Creasote - - - - - - ʒj.
Balsam of tolu - - - - - ʒij.
Powdered marshmallow, sufficient.

Soften the balsam of tolu in a mortar with a small quantity of ether until of the consistency of a solid extract; to this add the creasote and finally enough powdered marshmallow root to make a mass; divide this into 60 pills. These may be coated with balsam of tolu after the formula given in the U. S. P. for phosphorus pills, or they can be silver-coated or dispensed in capsules. They will be tasteless and should be preferred to any ready-made coated pills. They agree with consumptive patients especially, and give in addition to creasote the stomachic and expectorant properties of balsam of tolu. In short, they present an excellent mode of administering creasote. The dose is one or two, three times a day.

Numerous other methods of exhibiting creasote could be devised; the above preferred methods, pill, troche, or tablet and emulsion, however, will enable almost every one to take this efficient medicament, and will thus prove of service to a most unfortunate class of patients. —*Med. and Surg. Rep.*

Accidents with Cocaine.—Dr. Delbosc, a pupil of Dr. Reclus, hospital surgeon, who vaunts the employment of cocaine in surgical operations, has just published a statistical and clinical report on the accidents produced by this substance. He collected the histories published of accidents, from which he has been able to establish that up to the present time only five deaths have occurred after the use of cocaine. This proportion would evidently go against the method if only the bare facts be accepted without interpreting them. From the various observations published, it would appear that death resulted from the enormous doses that were administered, varying from about eleven grains to double that quantity. According to Dr. Delbosc, cocaine may be employed at the maximum dose of three grains, although he would not advise such a dose ordinarily, as beyond that quantity serious accidents occur.

To avoid rapidity of absorption, solutions too concentrated should never be employed. Dr. Reclus has adopted a 2% solution, and he has never since had any accident, although he has performed, since June, 1889, twenty-five important operations. It is not necessary in order to obtain anæsthesia to push the needle into the muscles of the subcutaneous cellular tissue, but into the thickness of the dermis. In spite of all precautions accidents may occur, and for them nitrite of amyl, injections of ether and caffein are indicated.—*Med. Rec.*, June 7, 1890.

Dr. Mitchell has employed coffee in a great many cases when the toxic symptoms of cocaine began to show themselves, and always with perfectly satisfactory results, and to relieve the extreme nausea, with heart-failure, that sometimes follows the administration of ether.

It is used as ordinarily prepared for the table, and is just as effective when used cold as hot. He does not think caffein would answer as well.—*Med. Rec.*, May 31, 1890.

The Prevention of the Toxic Effects of Cocaine.—Dr. Isidor Gluck has had occasion to use cocaine frequently in diseases of the eye, ear, nose, and throat, and seeing at times most alarming effects from its use, came to have a certain dread of it.

It is, when used in the treatment of the nose and throat, and when used hypodermically, that cocaine produces most alarming symptoms. Though employed in strengths varying from 4% to 20%, sometimes the weakest solutions will produce the toxic effect in one susceptible.

He now uses the following solution :

℞ Phenol - - - - - gtt. ij.
Aquæ destillat. - - - ʒj.
Shake until solution is perfect, then add
Cocaine hydrochlorate - - grs. x.

This formula has been in use for more than a year, and since using no toxic effects of the drug have had to be treated. It has been used in any quantity in any part of the nose or throat, without the least fear of harmful consequences. Phenol is itself a local anæsthetic, and is supposed to prevent absorption of the cocaine by forming a very superficial eschar, and thus its

toxic action is avoided. Further, the phenol prevents congestive reaction, prevents the decomposition of the solution, and renders it aseptic.—*Med. Rec.*, June 21, 1890.

Consultation with Homœopaths.—The *Med. Standard*, June, 1890, devotes an editorial note to the inconsistency of certain medical men who are supposed to be strong supporters of the "Code of Ethics," and notes that the *Nashville Journal of Medicine and Surgery* says that at the last meeting of the Tennessee Medical Society a resolution was introduced by Dr. J. D. Cole, of Newbern, in reference to the construction of that part of the code looking to consultation with homœopathic or other irregular practitioners. Commenting thereon, the *Nashville Journal* says: "There can be no doubt that certain circumstances might be looked upon as mitigating the stringency of this section of the code, as for example, the transference of a surgical case by an irregular to a surgeon, and it would seem that at times such a combination of circumstances have been taken advantage of, surgeons meeting and continuing in consultation with irregulars in cases entrusted to the former by the latter." The *Standard* wants to know wherein this position of the *Journal* differs from the much-opposed "emergency" clause of the New York code which led to the exclusion of the Medical Society of that State from the American Medical Association?

This inquiry is obviously intended, not to get an answer, but to point out the manner in which certain men slip over to positions for going to which they have abused others.—*Med. and Surg. Rep.*

Laryngeal Shock (Ictus Larynge).—Dr. Huguin (*Union Med. du Nord-Est*, March, 1890) relates a case of a very vigorous farmer, æt. 44 years, of previous good health, slightly arthritic, free from syphilis, who, in the midst of a meal, rose suddenly from the table and then fell collapsed upon the floor. He rose directly, not realizing that he had lost consciousness, but complaining of an extraordinary sensation in the throat. There was no further difficulty at that time. M. Huguin at first supposed that the man had choked from laughing. But two month later the farmer, returning from a journey, entered his house feeling well, placed himself at his table, ate with a good appetite, when suddenly experiencing a sudden malaise, of which he spoke to his wife, he uttered the word "apoplexy," threw himself upon a sofa, and within a few minutes was dead.

The character of this attack approaches, says the author, that of laryngeal vertigo, and an interesting point is to determine the relation which exists between the first and second attacks. Did the last stroke depend upon a previously latent cerebral condition? Was the last attack but an aggravated repetition of the first? M. Huguin propounds these questions without committing himself to an answer.—*Med. Bull.*

USEFUL FORMULÆ.

Burns.—As an application for burns, the following is recommended:

℞ Salol, - - - gram, 1 (15 grs).
Ol. Olivæ,
Aquæ calcis, - aa grams, 70 (ʒ2⅓).

M. Sig.: Apply on clothes.—*Deut. Med. Zeit.*

℞ Tannin, - - - - - gr. xv.
Alcohol, - - - - ♏xv.
Ætheris, - - - - - ʒjss.

M. Sig.: Apply; repeat two or three times a day.—*Ibid.*

Flatulent Dyspepsia is treated by Huchard as follows:

℞ Aq. chloroformi, - - - ℥x.
Aq. dest., - - - - - ℥viij.
Aq. Menthæ pip., - - - ℥ij.

M. Sig.: A teaspoonful before or after meals. Or,

℞ Tr. Gentianæ,
Tr. Valer.,
Tr. Nucis Vom., - - - aa ʒj.
Chloroformi, - - gtt., xx–xl.

M. Filt. Sig.: 10 to 20 drops in a little water 15 minutes before a meal. Or,

℞ Pulv. carb. pap., - - - ʒij.
Sodii bicarb., - - - - ʒjss.
Magnes. Calc., - - - - ʒj.
Pulv. colombo, - - - - ʒss.

M. Ft. Pulv. No. 40. Sig.: One powder ½ to 1 hour before meal.

If an antiseptic action is desired, we prescribe the following:

℞ Beta-naphthol,
Bismuthi salicyl.,
Magnesiæ, - - - - aa ℈iv.

M. Ft. Pulv. No. 30. Sig.: One powder before each meal.

℞ Pancreatin,
Sodii bicarb. or sodii benzoat.,
Magnesiæ, - - - - aa ʒj.
Pulv. nucis vom., - - - grs.vj.

M. Ft. Pulv. No. 20. Sig.: One powder before each meal.—*Deut. Med. Zeit.*

Infantile Diarrhœa.—

℞ Ferri sulphatis,
Sod. salicylat., - - - aa gr.x.
Glycerinæ, - - - - ʒiij.
Aq. dest., - - - - ℥ijss.

M. Sig.: A teaspoonful every one, two, or three hours.—*Centrbl. f. d. gesammte Ther.*

Solvent for Diphtheritic Membrane.—

℞ Pepsin, - - - - - ʒjs.
Ac. hydrochlor. dil., - - - ♏j.
Aq. dest.,
Glycerinæ, - - - aa ℥ss.

M. S.: Paint.—*Centbl. f. Chir.*

ORIGINAL ARTICLES.

REPORT OF THE PROGRESS OF MEDICINE.

BY C. LESTER HALL, M D., MARSHALL, MO.

Read before the Missouri State Medical Association, Excelsior Springs, Mo., May 7, 1890.

In obedience to custom, and in accordance with the request of the President, I offer the following report. Yet in consequence of the short time remaining after my knowledge of being appointed and an unusual amount of professional work during this period, will necessarily make my report brief.

Being disappointed in not receiving any assistance from my co-laborers of the committee, much will have to remain unnoticed that would have otherwise received just attention. And on the other hand the field of progress of medicine is so great, that to cover the entire ground would impose a tax upon myself and on your patience, which would be neither just nor generous; but with your permission I will present a few remarks upon the progress made the last twelve months. It naturally follows that the Russian, or prevailing influenza, should receive at least a cursory notice at my hands.

In this day when the germ origin of disease is so universally admitted and believed, I can hardly be expected to furnish you the etiology of the disease until our friends the bacteriologists have, in their laudable efforts, discovered and isolated the micro-organism which is the cause of this disease, which presents such varied and diversified symptomatology. Baumler, in discussing the epidemic, especially as it appeared in Freiburg, says there is no doubt that it is an infectious disease, the question arises whether it is miasmatic, a contagious miasmatic, or a purely contagious disorder. The great rapidity of its spread would indicate the former, but it is not possible that all the germs for such a wide distribution could come from one place, and it is scarcely conceivable that suitable conditions for the multiplication of the germ in the earth and the formation in this way of new miasmatic food, could be present in all the places in which the disease breaks out; and further, it is therefore probable that the human body itself forms a nidus for the germ, and we have to do with a contagious miasmatic, or a purely contagious disease. The absence of a discoverable period of incubation might be urged against this belief; but the author does not consider this objection of any weight, and is of the opinion that the disease is a purely contagious one, with a very intense contagiousness, and a very short period of incubation.

In support of this theory, might be mentioned the successful quarantine made by some hospitals and resorts of the country.

Among the most prominent symptoms were prostration, the effect of the specific poison upon the heart, as is the case in other zymotic affections, suddenness of attack, intestinal disturbance, hæmorrhagic tendency, high temperature, muscular pains, rigors and general loss of energy, with the recognized catarrhal condition of the mucous membrane of the air passages, constitute the main and almost constant symptoms of this disease. Perhaps the most wonderful and fortunate peculiarity in this disease was the marked immunity of the very young and old. In the New York Foundling Asylum, where there were between seven and eight hundred inmates, not a single diagnosis of influenza was made among children under two years of age; but in children from three to five years about 20% was affected, of these affected convalescence was speedily established. In the same institution all the severe cases occurred in persons between 18 and 25 years of age. In one ward there was not a single case, although there were many cases in the ward just above and the one below it. It is also worthy of note that none of the pregnant women were attacked. Out of 52 old ladies at a Home in New York only two suffered from influenza, and these were of moderate severity, but typical in character, while among the attendants of this institution who were younger, six out of fourteen had the disease and were quite ill with it. One sequel of this disease was suppurative otitis. Frequently the ear symptoms were of a graver character than those following scarlet fever, and were probably caused by the spread of an inflammatory process from the throat through the Eustachian tubes, thus affecting the middle ear, causing rupture of the drum head. Dr. O. D. Pomeroy has observed one case of mastoid periostitis, and a case in my own practice, with suppurative ostitis, was also strongly threatened with destructive periostitis.

Pneumonia and bronchitis were frequent sequels of the grippe. The pneumonia was rarely of that fran nature characteristic of ordinary croupous pneumonia; it was of an insidious nature, which made it difficult to determine, prior to the stage of consolidation, whether we had a case of bronchitis or broncho-pneumonia. The stage of consolidation remaining longer than in ordinary cases, often persisting for weeks. Heart failure was in many cases the immediate cause of death. A case occurring in my own practice, Mrs. B., to whom I was called January 21, and found her sitting up with intense pain in her left side, which was only relieved after several hypodermic injections of morphia locally applied; she had but slight fever, but rapid and slight cough. I was unable to detect any lung trouble, although I made frequent examinations, until January 25, when instead of the crepitant rale (which should have occurred first) I found commencing consolidation confined to the anterior and lower portion of the lung, which finally extended to the apex and persisted in spite of the counter irritation, stimulating expectorants and rubefacients; notwithstanding a general amelioration of all the symptoms and absence of fever

and relief of pain until March 7, when upon assuming a sitting posture, she was suddenly taken with difficult breathing, lividity of countenance, and prostration, ending in death in a very few minutes. A remarkable case occurred in the case of Mrs. P., to whom I was called Jan. 22, who was suffering from a relapse of the grippe, who also had intense pain in the left side, which could only be relieved by the hypodermic use of morphia, locally applied, and cantharidal vesication. There was not at any time during the attack any of the friction sounds of plurisy or the crepitation of pneumonia: but about the 26th she began to have bronchial hemorrhage, which persisted for about two weeks. There existed, also, hemorrhagic discharges from the kidneys. She finally recovered, except occasional attacks of muscular rheumatism, which are felt even to this day.

A singular contradiction of opinion appears in regard to the effect of the grippe on persons who are tuberculous. Dr. Daudet, of Paris, says that phthisical subjects supported the Influenza better than others; while Dr. Dujardin Beaumetz and others estimate that the prevailing Influenza has a tendency to greatly increase the mortality of tuberculous patients; my own observation coincides with the latter opinion.

In concluding this part of my report, I will call attention of the members of the association to the marked similarity of the symptoms in dengue and the grippe, and the oft repeated prediction by our European colaborers, who have experienced visitations first of dengue, and then influenza, and say, next in order, we may look for Asiatic cholera, and already reports come to us of cholera in the far East. As to the treatment, I will only suggest in the acute stage of the disease for the muscular pains the combination of antpyrin and fl. ext. belladona, and as a tonic during convalescence, especially where rheumatic pains exist, I have used with satisfaction a combination of iron and salicylic acid, known as Merrill's ferro-salycilata; but perhaps the remedy par excellence is whisky or brandy.

In a paper contributed to the Am. Med. Association by Dr. Carl Seiler, of Philadelphia, and one entitled "An Ædematous Form of Disease of the Upper Air Passages," by Dr. W. C. Glasgow of St. Louis, both describing a peculiar form of disease which has made its appearance in the last few years, there seems to be a marked peculiarity in the symptoms of this disease, and those which characterize the influenza so graphically described by Graves, or the grippe of Valleix. Seiler thus describes the disease: sudden attack of pain in the head and back, accompanied by a diurnal rise of fever about noon and midnight, associated with a general catarrhal condition, affecting in some cases the mucous membrane of the stomach and intestines, but more generally that of the upper air passages, producing œdema of these parts, accompanied in some cases with a slight film of membranous deposit. Convalesence in these cases was slow, and death followed in some cases from heart failure. Dr. Glasgow obtained post-mortem examination in a few cases at the St. Louis City hospital, in which he could only find an ecchymotic condition of the intestines; nor were there any signs of paralysis following the pseudo-membranous deposit upon the tonsils pharynx or larynx, which would have been the case had the deposit been that of diphtheria. The chronic form of the disease, which may last for many months, is not characterized by swelling of the mucous membrane, nor are there any patches of pseudo-membrane; but there is a peculiar yellowish red hue visible on the velum, pillars, and posterior walls of the pharynx, with marked œdema. In this chronic form, the prominent symptoms are, extreme weakness and lassitude and slight elevation of temperature and tendency to neuralgic pains upon the slightest exposure to cold, or drafts of cold air. In these cases there was relaxtion of the nasal tissues, producing occlusion of the nasal passages, upon the slightest mental or physical exertion. Constipation alternates at irregular intervals with slight diarrhœa, somnolence with insomnia. A peculiar feature in these chronic cases, which may have lasted for months, we may see an outbreak of the acute form with all the symptoms described before. Dr. Seiler was enabled by private correspondence to ascertain that the disorder had existed in every portion of the United States within the last few years. He sums up his observations as follows:

1. Neuralgic pains, usually in the back and chest, and often in the head, ears and limbs.
2. Extreme debility.
3. Mucoid infiltration of the sub-mucous tissues and the formation of sub-membranous patches on the surface of the mucous membrane.
4. Absence of febrile symptoms at first, and later, high temperature and relatively low pulse rate.
5. The absence of albumen in the urine, and liability to heart failure.
6. The gradual melting away of the pseudo-membranes and the absence of any odor from them.
7. The wide geographical distribution in this country, and infectious, but not contagious, nature of this disorder.
8. The specific action of benzoate of soda in relieving all symptoms promptly.

While this description of the disease concides pretty generally with the disease as described by Dr. Glasgow, who also recognizes the benzoate of soda as possessing greater therapeutic value than all other remedies; yet he has more recently contributed an article on "A septic and unusual form of lung disease existing in the Mississippi Valley, during the years 1886 to 1890, inclusive," claiming it as a different manifestation of the same general condition which produced the disease of the throat and upper air passages described by Dr. Seiler and himself. From the success of the benzoate of soda in œdematous diseases of the upper air passages, he was led to use it also in this condition of the lungs, and the success and diminished mortality was so striking that he was convinced that it was the best remedy for this class of cases.

The attention of the medical profession has recently been called by Dr. C. H. Stowell, of Washington, D. C., to the importance of treating colds, the neglect of which so often leads to catarrhal inflammations of the mucous membrane of the nose. Since the functions of the nose are, in addition to the sense of smell, to warm, moisten and filter the air, it is important that it should be kept as free from disease as possible, and prophylactic measures should be resorted too to prevent an acute or chronic inflammation being established, which, when once established, may extend down to the larynx, bronchial tubes and the lungs.

Bosworth replies to the question which is often put to the physician "whether catarrh will lead to the eventual development of lung disorder," by saying " it seems to me the answer should be 'it may, and often does." He also states that this may occur not simply as the result of the extension of the inflammatory process as indicated above, but the presence of catharral inflammation is a prominent factor, in inducing some of the graver affections of the lungs.

The straight and large opening of the oral cavity affords but little opportunity for the inspired air to come in close contact with its warm lining, certainly as compared with the small and tortuous passages of the nose. It is claimed by physiologists that a pint of serum is poured into the nasal sinuses every twenty-four hours, and the inspired air passing over the nasal mucous membrane takes up this moisture, and enters the bronchi in a state of saturation; therefore, it will not take any moisture from the bronchial mucous membrane. Not so with mouth breathing; there being no provision within the oral cavity for supplying moisture, the dry air enters the bronchi and deprives the mucous lining of its normal moisture, which becomes thickened and a source of irritation.

Considering the nose in the capacity of a screen, Dr. Roughton, of London, believes that it greatly diminishes the prevalence of phthisis. From this view we are justified in accepting the new nomenclature, and hereafter speak of the nose as the " modern Pasteur filter." But a germ filter may be converted into a germ producer, and thus Stowell concludes as follows:

1. The nose should be kept clean.
2. All obstructions to nasal respiration should be removed.
3. Mouth breathing invites diseases of the throat and lungs.
4. Mouth breathers are more likely to have certain of the diseases caused by the entrance of germs into the body.

If the nose plays so important a part, how can it be kept healthy? Answer: By promptly treating acute attacks.

In the *New York Med. Jour.* of March 22, 1890, under the head of "The Inhalation Treatment of Respiratory Diseases," Dr. W. L. Bauer called special attention to the value of the oil spray in the treatment of acute and chronic bronchitis, and prefers, as suggested by Dr. Rumbold after a series of experiments upon the nose and throat, the use of warm vaseline on account of its remaining in contact with the mucous membrane. Dr. Rumbold detected vaseline upon the mucous membrane of the upper air passages eighty hours after it had been applied by the warm spray. This harmonizes so perfectly with what I have daily observed in my office practice, that I most heartily endorse the treatment.

In this connection I desire to call the attention of the profession to a prescription to be used when practicable, with an oil spray, the value of which I am enabled to affirm (after much experience in its use), can not be too highly applauded, viz:

℞	Resorcin	gr. xxv.
	Aqua	qs.
	Menthol	gr. iij-v.
	Vaseline alba	℥i.

Mix.

Used first empirically as an ointment, to be snuffed into the nose two or three times daily, it has become no longer an experiment in the treatment of nasal catarrh. Since the introduction of Aloe's Ointment Atomizer, I have instructed my patients suffering with laryngeal troubles to inhale the vapors of this ointment, with satisfactory results.

Of late the germicidal action of the body fluids have attracted a great deal of attention, and bacteriologists have demonstrated that blood serum in its fresh state is fatal to many forms of bacteria. Nutall appears to have been the first to make the discovery; his observations have been confirmed by others, and even extended. It has been demonstrated that the blood serum of the various animals is deadly in different degrees to the anthrax, cholera, and typhoid bacillus, but not to the staphyloccus pyogenes aureus, the most common excitant of suppurative inflammation. Dr. Mitchell Pruden's experiments confirm previous experiments with the addition of a like result with fresh ascitic and hydrocele fluids. In most cases the numbers of staphylococcus were diminished to a certain extent, and the increase, where there was any, was slight. This would seem to show that if not fatal to the pus-producing organism, that it is in its fresh state not favorable to its growth. Therefore, in a condition of inactivity, they are not to be dreaded.

The isolation of the bacillus of Nicalaier as the bacillus of tetanus, by Kitasoto, of Tokio, Japan, within the last year marks an era as to the true nature of this dreaded disease. The refractory nature of this bacillus to the commonly employed germicides makes it a formidable foe. Kitasoto found this bacillus to be able to stand a temperature of 80° C. which effectually destroyed the adventitious organism, and left a pure culture. He found, then so refractory to influences which are quickly destructive to other bacteria, that it required an exposure of 5 minutes to a 100° C., of heat, and 10 minutes to a 5% solution of phenic acid to absolutely prevent their growth. The bacillus can best be cultivated in acid media, and in an atmosphere of oxygen. By this

process, Wyel of Berlin, has been able to transmit tetanus to dogs, which hitherto have been considered refractory to this disease. Inoculations from preparations of the medulla are more certain than from other portions of the central nervous system, and it may be expected that a manner of attenuating the virus, and even securing protection against the disease, is within the accomplishment of the immediate future.

Verneuil of France, and Nicolaier as well, claim that the earth may be contaminated by the excreta of tetanized animals, or by their bodies, and this accounts for the preponderance of tramatic tetanus in wounds of the lower extremities, and wounds made by objects which have been in contact with the earth. Three cases of tetanus recovered, reported by Prof. Baccille, of Rome, by hypodermic injection of a centigram of phenic acid every two hours. Prof. Baccille attributed the action of the phenic acid, not to its germicidal properties, but to its sedative action on the medullary centers. The successful treatment of exopthalmic goitre has greatly been increased by the use of tinct. strophanthus. At a recent meeting of the Medical Society of the District of Columbia, the subject was quite freely discussed, and a collection of a number of reported cases presented. In most of these, rest, tinct. strophanthus, ergot, and sulphuric acid constituted the treatment. The pathology of the disease is yet in doubt, but in the discussion which ensued, it was conceded that exopthalmic goitre was a disease of the central nervous system, leading to congestion of the thyroid gland and the orbital tissues, and to cardiac disturbances.

The lesion is undoubtedly in the medulla oblongata, and acts upon the pneumogastric and vaso motor nerves, and while we have no remedy that will go direct to the seat of the disease, we must content ourselves to a resort to those agents which relieve local congestion and the distressing symptoms. The treatment just indicated gives promise of success in the acute and subacute varieties, whilst chronic cases yield more stubbornly, if at all.

Nothing, perhaps, has excited more investigation recently than heart failure. Dr. John A. McWilliams (in *Brit. Med. Jour.*) says, that although the term is in general rather loosely used, there are still a large number of cases to which the expression "cardiac failure" correctly applies. The organic lesions most commonly associated with it are degenerative changes in the muscular walls, aortic disease, and disease of the coronary arteries; but it has been observed in cases where no gross structural lesion could be detected. The author discredits the usually assumed opinion that sudden stoppage of the heart takes the form of a quiescent standstill in a state of diastole, and a long series of experiments which he has carried out on the mammalian heart has convinced him that such a mode of failure is very exceptional, if we exclude the action of such cases caused by chloroform narcosis, asphyxia, and hæmorrhage. There are usually seen in animals, violent, irregular, incoordinating manifestations of ventricular energry. The normal heat action is at once abolished, and the ventricles exhibit a rapid, quivering, twitching, action, and become distended with blood. The muscular action is arythmic, some of the muscular bundles being contracted, whilst others are relaxed, and consequently blood can scarcely be expelled from ventricles which are in a state of diastole. In his experimets, the author has frequently been impressed with the ease with which this condition, one of whose titles is "Delirium Cordis," is produced. Indeed, it will frequently develop of its own accord, after the animal's thorax has been opened. The conditions associated with this heightened ventricular susceptibility are always abnormal ones, involving the normal nutrition in the heart.

The author believes that the fibrillar mode of contraction (delirum) is the mode of cardiac failure, and the direct cause of death in many cases of sudden dissolution of man. This is especially likely since it has been observed that the higher the mammalia, which is the subject of experiment, stands in the scale, the more easily this condition is brought about, and the more persistent and fatal it is. Indeed, with this explanation, the author claims it is impossible to account for the many cases of heart failure occurring in those apparently well, and in whom it is impossible that any sudden increase of weakening or degeneration of cardiac fibre could have taken place. It is probable that many instances of non-fatal syncope are due simply to a cardiac insufficiency, dependent on a temporary stoppage in the rhythm and force of the cardiac movement, while in fatal syncope there exists instead, or super-added to it, the condition of fibrillar contraction. In many cases there exists, no doubt, an altered nutrition of the cardiac muscle, which may or may not show visible signs on histological examination.

In concluding the article, the author admits the probability of sudden syncope from plugging of the coronary arteries, inhibitory influences, mechanical over-distention, or from pressure of the heart, but claims that it is probable that in many cases the fatal issue is determined by the occurrence of fibrillar contraction of the ventricles, while in other instances fatal delirium cordis may develop without any of these existing causes. Perhaps the most reliable discovery as to heart tonics is that recently claimed by some writers for iodide potassium, which they claim acts as a tonic to the heart muscle, acting, most probably, through the coronary arteries, and increasing the nutrition of the heart.

In gynæcological pratice, electricity is no longer an experiment, and to-day it stands out boldly as a rival of oophorectomy and hysterectomy. The use of galvanism for the removal of fibroids has been so satisfactorily tested as to no longer leave any question as to its great value. Spencer Wells and Thomas Keith have abandoned hysterectomy and have openly avowed themselves in favor of Apostoli's method.

Whilst its use does not always dissipate the tumor entirely, the size is very materially lessened, the growth is arrested, and the symptoms are relieved. The pain is

promptly lessened, hæmorrhage is absolutely controlled, with reduction in size of tumor. Pressure symptoms are removed, consequently there comes to the patient under treatment a general improvement in health. No longer is the surgeon justified in indiscriminately giving anæsthetics, but we are daily being brought to the light of the proper selection of the anæsthetic, suited to individual cases. Nitrous oxide should be given where short lived anæsthesia is desired, and Dr. Hewett, of England, calls special attention to the danger of giving ether when renal disease exists, in operations upon the upper air passages in which the actual cautery is employed, or when the site of the operation is such that continous administration of ether is impossible, and the time required is greater then the ether coma would last without further administration, or when a preliminary tracheotomy has been performed. He recommends chloroform or the A.C.E. mixture where ether is contraindicated. Chloroform is suggested in labor and to complete anæsthesia for the use of the forceps, or other obstetrical operations.

The result of investigation of the Hyderabad Chloroform Commission is in favor of chloroform as the safest and most reliable anæsthetic, and the 28,000 cases of chloroform anæsthesia, by Dr. Hunter McGuire, and 10,000 by Dr. Chisholm, in which there were no fatal or bad results, conclusively point to the fact that chloroform is to be the anæsthetic of the future. However, in America the question is yet to be considered a debatable one.

Chloral in Eclampsia.—Blanc recommends that the chloral be given and introduced into the stomach by means of the pharyngeal sound, the teeth to be held apart by a wedge, or the sound to be introduced through the nose, thereby to be sure that it be not introduced into the larynx. Nine to ten grams per diem is the usual dose, which, however, if necessary, may be increased to sixteen or eighteen grams in twenty-four hours. If grave albuminuria be present during pregnancy, he recommends the prophylactic administration of three to four grains in twenty-four hours. In order to avoid vomiting, the solution to be introduced should not be too concentrated, not above 1-40 or 1-30.—*Annals Gyn. and Ped.*

Salicylic Acid as a Prophylactic in Scarlatina.—Continuing the researches of Barkes, DeRossa has administered to sixty-six children belonging to families in which there was scarlet fever, a daily dose of 10 to 30 centigrammes (gr. jss–jvss), according to age, of salicylic acid. In three cases only did the disease develop.

He concludes that salicylic acid absolutely prevents the development of scarlatina even if it be taken in time and in a sufficient dose. Even when administered late and in too small a dose, it renders the disease very mild and benign.—*Annals Gyn. and Ped.*

Treatment of Tuberculosis in Children.—Dr. A Jacobi, in *Arch. of Pæd.*, says that: "Arsenic is a very important medicament in tuberculosis in children, but it should be given only in small doses. During the first years of life one may give every day, for a period continuing through weeks and months, two drops of Fowler's solution. This should be abundantly diluted, and given in divided doses after each meal. With the arsenic may be combined tonics or excitants, or narcotics, according to circumstances. After a while the treatment should be interrupted, especially if there be gastric or intestinal disturbances or localized œdema. If small doses of opium are given with the arsenic, the latter will be better tolerated.

Almost as efficacious as arsenic, is digitalis. Under its influence the contractability of the cardiac muscle will be increased, the arterial pressure will be augmented, and the frequency of the pulse diminished. Increase in arterial tension will be favorable to the renal function, improve the pulmonary circulation, and benefit the general nutrition. By improving the circulation of blood and lymph in the heart muscle, a beneficent action will be exercised upon the nutrition and development of the muscular fibres. For these reasons digitalis is indispensable in the phthisis which so frequently accompanies congenital or acquired insufficiency of the heart muscle.

As to the preparation to be used, it frequently happens that neither the infusion nor the tincture can be tolerated by the stomach, digitalin is an inconstant preparation, and it may be necessary to limit one's treatment to the fluid extract. It may be given in pills or capsules, and with it may be combined the bitters, the narcotics, iron, etc. If a rapid action is required, strophanthus, spartine, or caffeine may be substituted for digitalis.—*Med. Stand.*

Malarial Eye Diseases.—Dr. Schweinitz, *Amer. Lancet*, says that ophthalmia of the intermittent type sometimes replaces the ordinary manifestations of the disease. A form of Keratitis exists, properly described as "malarial," and quite distinct from those types of corneal inflammation which are simply associated with intermittent fever. Various functional ocular disturbances, amblyopia, paresis of accommodation, changes in the field of vision, even hemianopsia and night blindness result from malaria, as well as gross changes in the interior of the eye, optic neuritis, optic atrophy, retinal hæmorrhages, and hæmorrhage into the vitreous. In the event of the appearance of any of the disorders of the fourth class, it is necessary, before ascribing it to malaria, to eliminate rheumatism, syphilis, chronic Bright's disease, and chronic hepatitis; and, in so far as atrophies are concerned, the influence of quinine. In any doubtful case, and, indeed, in all cases, a careful examination of the blood should be made with the hope of determining the presence or absence of the corpuscles of Laveran. It remains to be shown what relations the character and number of these bodies bear to ocular diseases attributed to malaria.—*Med. Stand.*

DIFFERENTIAL DIAGNOSIS OF DISEASES OF THE RECTUM.

The following tables were arranged by Dr. Wm. Townsend Porter, being based on Allingham's "Diseases of the Rectum."

	Fistulæ. *1. External and Complete. 2. Blind—Internal.*	Rectal Abscess. *1. Acute. 2. Chronic.*	External Hæmorrhoids. *1. Skin Hypertrophies. 2. Venous or Sanguineous.*	Internal Hæmorrhoids. *1. Capillary. 2. Arterial. 3. Venous.*	Procidentia.	Polypus. *1. Adults. 2. Children.*	Pruritus.
Etiology.	1. More frequent in men and in middle age. Injuries to anus; to mucous membrane by scybalæ, straining at stool, foreign bodies swallowed. Exposure to wet and cold (sitting on damp seats after exercise) Scrofulous diathesis; depraved blood, 2. And phthisis.	Same as fistulæ. Phthisis predisposing only.	Irritation of anal region, as diarrhœa morbific discharges; friction from clothing; use of printed paper as a detergent; uncleanliness. Obstruction of venous return, as from portal obstruction; constipation; displaced or gravid uterus; straining. High living, especially on meats. Very coarse fare, alcoholics, excessive smoking.	1, 2. All those causes given under external hæmorrhoids and hereditary influence, genito urinary disease. 3. Common in multiparæ about menopause and in men with liver disease.	More common in children, because of straight sacrum and violent straining. Also caused in children & sometimes in adults, by diarrhœa, worms stone in the bladder, phimosis, polypus recti, allowing child to sit too long on vessel.	Polypus is more common in adults.	Obstruction of venous return from rectum, as by constipation; hepatic disorders; internal hæmorrhoids; uterine diseases. Idiosyncrasies in diet. Excesses at table, combined with lack of exercise. Excessive smoking. Dietetic disorders. Latent gout. Parasites.
Pain.	1. Little, if any. 2. Comes with or shortly after defecation, generally worse after; may last during rest of day as a dull burning. Much aggravated by diarrhœa.	1. Acute, constant, increased on movement and handling. 2. May be perfectly painless, even on manipulation.	None, unless inflamed. If inflamed. pain during and after defecation. Increased by movements and coughing. Pain is chiefly from spasm of sphincter nipping the growths.	1. Little, unless inflamed. Frequent pain in back and limbs, in spermatic cord and testicles. May have burning sensation. 2, 3. Little pain unless inflamed, or caught by tight sphincters. If patient complains of great pain on defecation, he has not uncomplicated piles.		When protruded cause pain, irritation and spasm, more markedly in children.	
Discharge.	1. Puriform, watery. If complete, perhaps flatus and (rarely) feces. 2. Of matter on motions. Phthisical fistulæ rarely purulent, but thin, watery and curdy.		Slight stain of blood on motions.	1. Bleeding usually severe on defecating or straining. 2 Blood in various quantities on defecating and straining, a gummy acrid mucus. 3. Bleeding slight usually.	Often a discharge of mucus.	Very ichorous and ill-smelling mulberry polypus (child's form) bleeding freely at times.	If parts are eczematous, a weeping discharge.
Constipation or Diarrhœa.		Constipation.	Constipation, when inflamed.	1. Constipation.	In old cases more or less incontinence. Often a nasty teasing diarrhœa.	2. If high up, may cause diarrhœa.	Usually constipation.
Signs Without the Bowel.	1. External orifice small, pouting, papillary. Skin not detached. Always induration, like a pipe beneath the skin. In phthisical fistulæ opening is comparatively large, irregular, skin detached. surrounded by livid flaps of skin. Can pass probe through aperture and sweep it around under thin skin over an area often of an inch. Skin usually discolored. 2. Skin often discolored over sight of abscess.	Redness of integument. Inflammatory hardening. Later fluctuation. Never wait for it. 2. Only evidence may be a flat boggy crepitating enlargement at the side of the anus.	Cannot be returned within anus. *Uninflamed:* 1. Little pendulous tabs or flaps, true hypertrophies of skin, exaggerations sf natural rugose state. 2. Blue, varicose-like veins, rather raised above the surface and running up into the bowel. *Inflamed:* 1. Little tabs now swollen, enlarged, œdematous, shiny. tender, may suppurate. Œdema may extend into bowel and form large, swollen ring of mucous membrane (see procidentia) and skin all around the anus. 2. Sanguineous or venous form, may be swollen into ovoid or globular bluish tumors, very hard, exquisitely tender Feels to touch as if containing foreign body. Very rarely may be emptied of their contents by manipulations.	2, 3. In majority of cases can be returned when prolapsed. Arterial form usually, and venous sometimes accompanied by cutaneous excrescences Tumors when long prolapsed take on pseudo-cutaneous appearances.	Surrounds anus without division into separate tumors, only the natural folds of the bowel being observed. Generally one distinct fold towards perineum, rest forming horse shoe shaped projection around sides & back of anus. Soft and velvety to feel.		1. Characteristic conditions. A loss of the natural pigment. Patches around anus of a inelastic, dull, dead white skin. 2. Rarity; nothing but a thickened roughened more rugose condition of the skin about anus. 3. May be a distinct eczematous rash with weeping; or, 4. A dry rugose condition with bright redness from scratching. 5. A quantity of minute scales forming irregular rings. 6. Often cracks radiating from the anus and extending up to sacrum.

TABLE I.—CONTINUED.

	Fistulæ. 1. *External and Complete.* 2. *Blind—Internal.*	Rectal Abscess. 1. *Acute.* 2. *Chronic*	External Hæmorrhoids. 1. *Skin Hypertrophies.* 2. *Venous or Sanguineous.*	Internal Hæmorrhoids. 1. *Capillary.* 2. *Arterial.* 3. *Venous.*	Procidentia.	Polypus. 1. *Adults.* 2. *Children.*	Pruritus.
Signs Within the Bowel.	1. Internal and complete fistulæ: inner opening may usually be felt as a small rounded roughness in the mucous membrane. Usual site of internal openings of all forms, between the sphincters. 2. Phthisical form; inner opening almost always large and patulous.			1. Small florid raspberry-looking tumor, having a granular, spongy surface, bleeding on slightest touch. Often situated high up. May be only a deep red velvet appearance of mucous membrane readily bleeding. 2. May be small or large, hard, vascular surface glistening, slippery to touch. If scratched, bleed freely, bright red blood in jets. A strongly pulsating artery often felt entering upper part of each tumor. 3. Often very large. Hard bluish or livid surface may be smooth slimy, pseudo-cutaneous. If pricked, blood may be either arterial or venous.	*Intussusception.* Constipation, sensation of burning and fulness in bowel, with tenesmus and difficulty in defecating. A deep sulcus around inner column of intestine.	1. Rare: a fibroid tumor, usually of good size (English walnut). 2. A tumor neither very hard nor very soft, smaller than 'child's,' of multiple, pedicle often hollow; a large vessel runs up the stem. Attached above sphincters by peduncle. 2 A small vascular tumor, with a pedicle often two inches long. They resemble a small half ripe mulberry.	
Miscellaneous.	1. Sinus often of dense tissue; its interior smooth and shining, like inner coat of artery. 2. In most phthisical patients, there is much soft, long, silky hair about the anus. In these, also, the sphincters are weak and resist but little.	1. Constipational disturbance; course rapid. Sphincters usually contracted. 2. Sudden and deep-seated suppuration often occurs After severe itching of the part, with only erythematous redness of the surface.	Earliest symptom, a sensation of fullness and plugging up, and slight pulsation in anus. Often annoying itching, coming on at night, when patient gets warm in bed. Constant throbbing and sensation of foreign body thrust in anus. Some straining with sanguineous form. General feverishness; tongue furred. Anus swelled and tender. Spasm of sphincters from irritation.	1. Sometimes protrudes when situated anteriorly in women. Lassitude; occasionally sexual failure; amenorrhœas usually in single pile. Sphincters contracted. 2, 3. Protrude on straining. No feeling of proper relief after stool. In old standing prolapsed nases, often difficulty in retaining wind or loose motions. Sphincters usually somewhat relaxed.		1. Without previous marked rectal discomfort, he discovers substance protruding when at stool; this is characteristic. 2. Frequent desire to go to stool, tenesmus, a fleshy mass protruding or appearing on defecating.	Irritation worse at night, especially when warm in bed.

TABLE II.

	Irritable Ulcer. (Fissure.)	*Simple Stricture.*	*Stricture With Ulceration.*	*Cancer.*	*Rodent-Lupoid Ulcer.*	*Impaction.*	*Villous Tumor.*	*Rectal Neuralgia.*	*Sacro-Coccygeal Arthralgia*	*Proctitis.*
Etiology.	More common in women than in men. Injuries of mucous membranes at verge of anus from straining, scybalæ, etc. Polypus. Uterine displacement. Syphilis.	Traumatism (probably other causes.)	Syphilis, tuberculosis, chronic constipation with unhygienic surroundings. Severe dysentery and diarhœa. Traumatism; puerperal injuries. Rectal operations in patients of bad constitution.	More men than women. Commonly a disease of middle life.	Very rare, almost always scrofulous diathesis.	More common in women, especially old ones, and after childbirth. Primary cause loss of power in muscular coat, as from habitual constipation, pressure of child's head; spasm of sphincter causing constipation.	Very rare.	Occurs in delicate, irritable nervous people with neuralgia elsewhere One attack predisposes to another Exposure, general debility, digestive disturbance.	Traumatism Neuralgic habit.	
Pain.	Intense, persistent, regularly repeated. Commencing on or immediately ofter defecation. May cease shortly after the act or continue hours, as a severe burning or dull throbbing pain. One or more spots most tender (exposed nerve). In circular ulcer defecation causes less pain than club-shaped. After pain quite as severe.	Very rarely pain in bowel itself. Usually referred to perineum, penis, thighs, stomach, etc.	At first sight. Burning and uncomfortable sensation after first morning stool. At times, but seldom, morning diarrhæa is accompanied by griping pains and flatulence. Pain at length dull, wearing, induced by standing or walking; begins to have rectal night pains down hips, legs and sometimes penis. When ulceration approaches anus pain is great.	Usually horribly painful, unremitting in later stages. Often set up by defecation. Increased by and continues after defecation.	Usually most terribly painful, constant, burning gnawing pains 'like red-hot iron.' Aggravated by defecation.	Severe pain in right lumbar region, followed by pain in left inguinal region; not rare.	No pain usually, only discomfort.	Pain not aggravated by motions.	Pain in rectum and at end of spine; cannot sit with comfort unless on cushion ring. If constipation exist pain is great before & after stools. Pain on bending body and on moving coccyx.	Acute proctitis. No abdominal pain or tenderness (as in dysentery) Pain generally confined to sacrum & perineum. Chronic proctitis. Sense of rectal heat and fulness.

TABLE II.—CONTINUED.

	Irritable Ulcer. (Fissure.)	*Simple Stricture.*	*Stricture With Ulceration.*	*Cancer.*	*Rodent-Lupoid Ulcer.*	*Impaction.*	*Villous Tumor.*	*Rectal Neuralgia.*	*Sacro-Coccygeal Arthralgia*	*Proctitis.*
Discharge.	Frequently blood and mucus.	Like white of unboiled egg.	1st. Passage generally wind, a little loose motion, some 'coffee ground" discharge. Occasionally it is like raw whites of egg, or jelly fish; more rarely there is pus. 2d. Passage usually larger, often lumpy, occasionally smeared with blood.	Blood and mucus.	Sore is usually dry.		Abundant discharge of glairy mucus on the motion or often involuntarily; blood often lost in great quantities at defecation.			Perhaps discharge of blood and mucus as in dysentery
State of Bowels.	Usually constipation.	No diarrhœa.	Diarrhœa, or alternating attacks of diarrhœa and constipation.	Diarrhœa; often incontinence						Uusually diarrhœa of dysenteric type.
Signs Without the Bowel.	Site of fissure often marked by a small clavate papilla, or minute muco-cutaneous polypoid growth. Sometimes by an inflamed and swollen piece of skin.		In later stage usually fistulous orifices Generally also outside anus swollen and tender flaps of skin; club shaped, shiny, covered with ichorous discharge. This indicates cancer or severe ulceration.	Generally outside anus swollen and tender skin flaps, club-shaped, shiny, covered with ichorous discharge. This indicates cancer or severe ulceration.		Anus nipple shaped on straining Irregularly soft doughy tumors usually to be felt in large bowel on external palpation. These differ in size and shape at different times.	Tumors frequently descend on defecation or walking. This is a leading symptom.			
Signs Within the Bowel.	*Fissure:* Just within orifice an elongated, club-shaped ulcer; if recent, the floor red and inflamed; if of long standing, of a grayish color, with edges well defined and hard. *Irritable ulcer:* Is usually small, circular, clean cut, situated higher up the bowel than the club-shaped ulcer; found above or about lower edge of internal sphincter. These ulcers feel somewhat like fistulæ, but have harder more defined edges, have no elevation above surface of surrounding mucous membrane, as fistulous orifices commonly have. They may burrow and cause fistulæ.	Sometimes resilient semi-circular or annular, like a cord around the bowell.	*Earlier Period:* Ulcer often dorsal, large (1 by 1½ inches), surrounded by raised and sometimes hard edges. Acutely painful to touch. Bleeds readily. Speculum shows base to be grayish or very red and inflamed. Often lumps (enlarged rectal glands or gummata) near ulcer. *Later Period:* Deep ulcers, great thickening of mucous membrane. Often roughening. Ulceration is usually for not more than four inches from anus. Always stricture in later stages.	A growth usually within 3 inches of anus. May be stony hard at one point & quite soft at another. In epithelioma, mass is usually movable on tissues beneath. In scirrhous and encephaloid, mass usually fixed. Scirrhous often found as a hard rectal tumor over prostate gland.	Shape of ulcer usually irregular, edges sharply and cleanly cut. Does not undermine mucous membrane. Neither edge nor base is at all hard. Mucous membrane around abruptly healthy. Surface very red and mostly dry.	Globular, clayey mass, just above internal sphincter; often movable. Concretions differ from impactions in being cylindrical (fusiform) in shape and having a nucleus. They are usually covered with pus and extremely fœtid.	Tumor is a lobulated spongy mass with long villous-like groups studding its surface Bleeds freely when touched. Is usually attached by a peduncle either long or short.			
Miscellaneous.	Most usually dorsal; often multiple if specific. Nervous and hypochondriac symptoms common. Many anomalaus symptoms as: retention of urine; pain and numbness in back and thighs, etc. Sphincters often hypertrophied & spasmodically contracted.		Onset insidious. Earliest symptom "morning diarrhœa," desire immediately on getting out of bed. He goes to stool, but with unsatisfactory result. Must go again after breakfast, perhaps again before 10. Then all right for balance of day. In later stages, diarrhœa both evening & morning. If constipation alternate with diarrhæa, a large quantity of feces escapes during the latter. In later stages, power over sphincters always lasts.	Cancerous cachexia. If growth be high up, frequent and severe vomiting is an early symptom. Reflex straining distressing & often violent. Peculiar pathognomonic odors; when growth is high up sphincters may be paralyzed.	Tendency to spread superficially. Often repairs rapidly, and as rapidly breaks down.	Symptoms numerous and obscure Face anxious, complexion muddy yellow. Abdomen doughy; transverse colon large. When erect, straining severe, continuous, irresistible, usually passing off upon lying down Dyspepsia, irritability, nervousness, despondency, morning vomiting, loathing of all food as soon as a few mouthfuls have been taken. Excessive thirst, a peculiar ringing barking cough, particularly in women. Night sweats. Spasms of sphincters, hard and wood-enlike.	Aspect often pale, cachectic, like in malignant disease.	When pain is confined to sphincters, they are spasmodically contracted.	Coccyx usually very movable.	In *acute proctitis*, dysenteric symptoms constitutional distubbance slight. Bladder often sympathizes. *Chronic Proctitis*. Usually in old people sense of rectal heat and fullness; frequent desire for stool; great tenesmus.

REPORT ON PROGRESS.

OBSTETRICS.

BY E. MUELLER, M.D., ST. LOUIS, MO.

Removal of Both Ovaries and Tubes During Pregnancy.

In view of the common belief that both ovaries cannot be removed without interrupting an existing pregnancy, two cases recorded within the year, and cited in an editorial in the *Jour. of the Am. Med. Ass'n*, are of interest, as they seem to prove the contrary.

In the first case a Chicago operator removed both ovaries and tubes for hystero-epilepsy from a woman who was pregnant about one month, the condition having been overlooked at the time of the operation. The patient had an uneventful pregnancy, and gave birth to a fine healthy baby 8 months and 10 days after the operation. The ovaries and tubes were in a relatively normal state.

In the second case an English operator removed both ovaries, greatly disorganized by the presence of dermoid tumors, together with the tubes, from a patient about three months pregnant. When last heard from, there was every prospect of her going to term. "The evidence furnished by these two cases," the author concludes, "is sufficient to establish finally the proposition that the menstrual nisus is not the primary, essential and determining cause of labor."

Pregnancy with Almost Complete Atresia of the Vagina.

The case is reported by Dr. C. Heyder, in *Archiv. f. Gyn.* During an examination in the seventh month of pregnancy, a membrane was accidentally discovered, stretched somewhat obliquely across the vagina, about 4 cm. above the hymen, the latter structure having been torn in the usual place. On careful examination a small opening, about 2 mm. in diameter, was found close to the symphysis. The distance between the membrane and the hymen was about 3½ cm., on the posterior, and about 2½ cm. on the anterior vaginal wall.

By means of a Paquelin's cautery, the membrane was divided, after having been put on the stretch from behind by a sound introduced through the opening. The resulting flaps were then excised with scissors, and the mucous membrane united by fine silk sutures. Hæmorrhage was not inconsiderable, but was easily controlled.

The vagina presented perfectly normal dimensions behind the obstruction. The excised membrane was about 2 mm. thick near the border, and gradually diminished in thickness toward the opening. Its structure could not be distinguished from normal vaginal mucous membrane. No scar tissue could be found on microscopical examination or otherwise, and there is no doubt in the author's mind that he had to deal with a congenital transverse septum vaginæ. According to Dohra these transverse septa originate in the same manner, and begin to be formed about the same time as the hymen.

Eclampsia During Pregnancy an Indication for Cæsarean Section.

T. Halbertsma (*Neberl. Weekbl.*) has performed Cæsarean section in three cases of eclampsia. In the first case, operated upon in 1878, the child was saved, but the mother died of peritonitis. In the second case, in 1888, both mother and child lived, the mother being discharged six weeks after the operation as perfectly well. In the third case the operation was performed after hypodermic injections of morphine and inhalations of chloroform had been tried without effect; mother and child were saved. The author recommends this mode of treatment on account of the very unfavorable prognosis of eclampsia.—*Schmidt's Jahrbuecher.*

A Case of Labor in a Robert's Pelvis.

It is reported by Dr. Geo. Haven in the *Boston Med. and Surg. Jour.* Delivery was attended with great difficulty. The hand, introduced for the purpose of effecting dilatation of the os, detected a transverse narrowing of the pelvis. Repeated applications of the forceps, the last one with an axis traction instrument, failed to advance the head. Version had also been thought of, but was considered too dangerous on account of the well-marked Bandl's ring. The cord having in the meantime ceased to pulsate, the head was perforated and delivery effected with the cranioclast. Even then delivery was difficult, the shoulders giving much trouble.

The following measurements were taken twenty days after delivery:

		Below normal.
Anter. super. spinous processes,	8.4 in.,	2 inches.
Crests,	10.4 "	1.25 "
Trochanters,	12. "	.5 "
External conjugate,	6.6 "	1. "
Posterior spines,	1.8 "	3.2 "
Tuber. ischia,	2.8 "	.25 "
Diagonal conjugate,	7.2 "	

thus showing a marked narrowing of the transverse diameter; the ilia were bent upward, their crests extending at a great height above the pelvic brim.

The form of transverse narrowing known as Robert's pelvis is very rare; the author has found only 14 cases recorded in medical literature. In this case the measurements and general shape of the pelvis compared closely to those which would be expected in a Robert's pelvis, with the single exception that the base of the sacrum was not sunk deeply between the posterior superior spines.

The Treatment of Uterine Inertia During Labor.

Prof. Max Runge writes on this subject in *Therap. Mon.-Hefte.* He says that weakness of labor pains before rupture of the membranes is hardly ever a source of danger to either mother or child; after the escape of the water, however, it may cause the death of the child by asphyxia, severe contusions of the maternal tissues, and atonic post-partum hæmorrhages of a serious character. Primary weakness of labor pains, where uterine action is insufficient from the beginning of labor, as for instance, in persons of weak constitution, and in abnormal distention of the uterus by hydramnion, or by a multiple pregnancy, is to be distinguished from the secondary condition, where the uterine contractions are good in the beginning, but finally become weak, because there is too great a resistance to overcome (a large head, contracted pelvis, rigidity of soft parts).

The treatment of the primary form consists in increasing the patient's strength by suitable nutrition during labor, or if possible already during pregnancy, and the administration of wine, coffee, etc.; evacuation of the bladder and rectum, pure air and regulation of the temperature of the lying-in-room are essential. When there is weakness of the muscular tissue of the uterus, and also in tardy dilatation of the os, irrigations of warm carbolized water every one to two hours are to be recommended; also full baths, and narcotics in large doses. When there is abnormal distention of the uterus, it is advisable not to rupture the membrane until the os is dilated to some extent, in order to avoid prolapse of the cord at a time when labor cannot yet be terminated by turning and extraction.

In the secondary form of uterine inertia the treatment must be more energetic. Stimulants, as wine or champagne, are of primary importance; when there is much irritability, opiates or a few inhalations of chloroform may be administered. If the contractions take on a spasmodic character, it is best to procure rest and recreation by giving sedatives in large doses (chloroform inhalations, chloral, 30 grains per os or 75 grains per rectum, or $^1/_6$ to $\frac{1}{3}$ grain of morphine hypodermically. Warm baths, continued for perhaps 45 minutes, and repeated if necessary, often have an excellent effect.

Rupturing the membranes as long as the os is imperfectly dilated, and before the presenting part is engaged in the pelvis, is not without danger on account of a possible prolapse of the funis, and it ought to be avoided, if possible. The introduction of a bougie into the uterus should be had recourse to only in cases presenting special difficulties. Frictions of the womb with the external hand are applicable only just before the head passes the vulva, and after delivery.

Runge condemns the use of ergot during labor, but points out the great advantages of using ergot, and especially cornutin, after delivery.—*Schmidt's Jahrbucher.*

Combined Version in Placenta Prævia.

In *Nederl. Tijdschr. v. Verlosk.*, T. Ligterink reports thirteen cases of placenta prævia treated by combined version at the Leiden clinic. Only one of the thirteen women died. In this case a dirty sponge had been introduced into the genital canal by a midwife with a view of stopping the hæmorrhage. The resulting pyæmic phlebitis could, therefore, not be charged to the method of combined section. Of the children, eight died.

The expulsion of the child is left to nature, if there are no contra-indications; sometimes a period of twenty-four hours is allowed to pass before extraction of the child is resorted to. When hæmorrhage occurs, traction is made on the foot until the blood ceases to flow. Ligterink points out the following advantages of combined version: 1. It can be used at an early period. 2. Long continued tamponade is unnecessary. 3. After turning the child, spontaneous delivery may be allowed to take plaee, without endangering the life of the mother. 4. Sufficient time is allowed for the use of restoratives. 5. By the slow extraction any further hæmorrhage is avoided.—*Schmidt's Jahrbucher.*

Prolapse of Dermoid Cyst per Rectum During Labor.

In the first case, reported by Dr. Gelstroem (Sebastopol) in *Centrbl. f. Gyn.*, a partially decomposed dermoid tumor was removed from the pelvis of a multipara seven days after confinement; there was no perineum; the tumor seemed to have come from the abdominal cavity, and broken through either Douglas' pouch or the rectum. Several weeks later a scar was found in the anterior wall of the rectum, which made it probable that the tumor took the latter route during its descent into the pelvis.

Brosin, of Dresden, reports another case. The tumor which he had occasion to examine was about the size of a fist, and had been removed from the rectum of a woman, æt. 22 years. The attending physician sent the following history: Five weeks after delivery hemorrhages from the rectum made their appearance, accompanied by severe pain. On examination, with the hand introduced into the rectum, a cyst could be felt, which discharged a quantity of matter and hair, after being torn with the finger-nails. Six months afterward renewed pain in the rectum and other symptoms were experienced. A dermoid tumor was then removed from the rectum by galvano-cautery. The tumor seemed to have grown from the wall of the former cyst. —*Schmidt's Jahrbucher.*

Treatment of Post-Partum Hæmorrhage.

Prof. Kuestner (Dorpat) says in *Deut. Med. Woch.*, that hæmorrhages occurring immediately after delivery take their origin either from injuries or from the phys-

iological utero-placental wound. Hæmorrhages from lacerations of the external genitals are to be checked by compression or suture; bleeding cervical lacérations are likewise to be sutured, after drawing the cervix outside of the vulva by means of a vulsellum. To prevent atonic post-partum hæmorrhages, very slow extraction of the child's body, besides waiting for the normal period of placental expulsion, are recommended. Never should any attempts at placental expression be made during the physiological period of uterine relaxation (during the first fifteen minutes); but under all circumstances we should wait until a number of after-pains have occurred spontaneously, before expression of the placenta is resorted to. To stop atonic hæmorrhages, Kuestner recommends preparations of ergot, especially cornutine, thermic irritation, and bimanual massage of the uterus. If these remedies do not succeed he prefers tamponade of the uterus with iodoform gauze to all other means for controlling the hæmorrhage. He has used this method in eight cases with the best results. Iodoform gauze tamponade is especially recommended in cases where the source of the hæmorrhage cannot at once be diagnosticated, because by tamponing the entire genital tract, hæmorrhages from cervical or vaginal lacerations can be arrested with certainty. The author considers the method especially well suited to dispensary and private practice; he thinks that a box of iodoform gauze ought to form a part of every obstetrical outfit.—*Schmidt's Jahrbucher.*

In the *Jour. of the Am. Med. Ass'n* an editorial writer calls attention to the faradic current as an agent in the treatment of post-partum hæmorrhage. He speaks of it as the quickest, most certain and efficient means of securing uterine contraction. He doubts the necessity of stuffing the uterus with iodoform gauze, when uncertain of diagnosis; a few rigorous contractions of the uterus would at once settle the question whether the hæmorrhage was due to inertia or rupture. Every obstetric bag should, in his opinion, be supplied with a good pocket battery, "for with it severe hæmorrhage from uterine inertia is a practical impossibility."

Variations in the Caustic Action of Carbolic Acid.—M. Charles has shown that carbolic acid in solution, glycerine or alcohol is not caustic, whatever be the degree of concentration. Even saturated solutions are readily borne by the skin and mucous surfaces, while the concentrated aqueous solutions are markedly caustic and produce a lively sensation of heat even upon a healthy skin. A small addition of water, however, to an alcoholic or glycerine solution suffices to render it caustic. The fact is readily explained if we admit that an instable combination which is decomposable by water exists between carbolic acid, a body related to the alcohol, and alcohol or glycerine, which latter is also an alcohol. In fact a saturated aqueous solution of carbolic acid produces more heat when mixed with glycerine than when added to a corresponding quantity of water.—*Le Bul. Med.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., Editor. W. C. MARDORF, M.D., Associate Editor.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, AUGUST 23, 1890.

Epilepsy in Its Social Bearings.

Epilepsy in its relations to marriage is of the highest importance. The physician is here placed in a very difficult position. He has his choice between betraying his patient's confidence and revealing the state of affairs to those interested, and of keeping silent, and thus allowing a grave injustice to be inflicted. Benedikt (*Wr. Med. Woch.—Deutsch. Med. Zeit.*) believes a general congress for medical ethics should be called, for the purpose of pointing out to the physician the proper course to be pursued in such and similar cases. In Germany, a physician lays himself liable to prosecution if he reveals anything about a patient's illness without the latter's consent; we do not believe that the laws are so severe here, or if they were, that a jury would punish a physician for giving out professional secrets in such an emergency. An agreement by the profession on the course to be followed on such occasions would probably be of great effect in influencing proper legislation.

In certain cases of epilepsy in children mental exercise is one of the chief items in the treatment, and yet epileptic children are kept from school, or allowed to be sent home by the schoolmaster, says Benedikt. In organic epilepsy the usual treatment with bromides does more harm than good. If they are employed for the purpose of diminishing the number of convulsions, a period will follow during which the outbursts are much more severe. Aside from this, however, the greatest fault is that it hinders youthful individuals in their proper development. Physicians, as well as the general public, do not view these cases with the proper degree of resignation. Such children should be placed in school in the front row, in seats with high backs, from which they can be easily removed whenever an attack

is seen to be impending. Efforts should be made, above all, to remove the idea that epilepsy can be communicated to spectators by simply witnessing a convulsion. This is not the case, though it is certainly true that choreic and hysterical convulsions do sometimes so occur, but this is only in susceptible females, as a rule. On this account greater care is necessary in schools for girls. In addition to this the teacher should learn to understand the mental peculiarities of such children, and treat them accordingly.

As to epilepsy and crime, those epileptics who are inimical to the common welfare should be placed in insane asylums; those who have not committed any infraction of the laws should be allowed their liberty. Cases occupying an intermediate position are those to whom the law affords no protection, who may, by virtue of their condition, become guilty of a crime at any time. It is proposed to put such persons in medical hands under certain legal restrictions.

Benedikt remarks that the services of the new Swedish school (Ibsen) in popularizing the teachings concerning the hereditary transmission of epilepsy can hardly be overvalued. Ibsen's portrayal of the evil results of a diseased ancestry, as shown upon the stage, has had more effect than would have been accomplished by the enforcement of a thousand sanitary laws.

Bill to Prevent Food Adulteration.

In the House of Representatives the Committee of Agriculture and Forestry recently reported a bill for the prevention of food adulteration, which we print in full, because of its general importance. Laws of this character are much needed, and though the present bill is lax in some of its provisions and leaves loopholes here and there for escape, it will still answer very well as an entering wedge.

A bill for preventing adulteration and misbranding food and drugs, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, for the purpose of protecting the commerce in food-products and drugs between the several States and Territories of this Union and foreign countries, the Secretary of Agriculture shall organize in the Department of Agriculture a division to be known as the food division, and make necessary rules governing the same to carry out the provisions of this act, and appoint a chief thereof, at a salary of three thousand dollars per annum, whose duty it shall be to procure from time to time, under rules and regulations to be prescribed by the Secretary of Agriculture, and cause to be analyzed or examined samples of food and drugs sold or offered for sale in any State or Territory other than where manufactured. The Secretary of Agriculture is hereby authorized to employ such chemists, inspectors, clerks, laborers, and other employees as may be necessary to carry out the provisions of this act.

Sec. 2. That the introduction into any State or Territory from any other State or Territory, or foreign country of any article of food or drugs which is adulterated within the meaning of this act is hereby prohibited, and any person who shall wilfully and knowingly ship or deliver for shipment from any State or Territory or foreign country to any other State or Territory, or who shall knowingly receive in any State or Territory from any other State or Territory or foreign country, or who, having so received, shall deliver, for pay or otherwise, or offer to deliver to any other person, any such article so adulterated within the meaning of this act, shall be guilty of a misdemeanor, and for such offense be fined not exceeding two hundred dollars for the first offense, and for each subsequent offense not exceeding three hundred dollars, or be imprisoned not ceeding one year, or both, in the discretion of the court.

Sec. 3. That the chief of said food division shall make, or cause to be made, under rules and regulations to be prescribed by the Secretary of Agriculture, examinations of specimens of food and drugs which may be collected from time to time under rules and regulations to be prescribed by the Secretary of Agriculture under its direction in various parts of the country, and publish in bulletins the result of such analyses. But the names of manufacturers or venders of such foods or drugs analyzed shall in no case be published in such bulletins until after conviction in the courts of violation of this act. If it shall appear from such examination that any of the provisions of this act have been violated, the Secretary of Agriculture shall at once cause a report of the fact to be made to the proper United States district attorney, with a copy of the results of the analysis duly authenticated by the analyst under oath.

Sec. 4. That it shall be the duty of every district attorney to whom the food division shall report any violation of this act to cause proceedings to be commenced and prosecuted without delay for the fines and penalties in such case provided, unless, upon inquiry and examination, he shall decide that such proceedings cannot probably be sustained, in which case he shall report the facts to the food division.

Sec. 5. That the term "drug," as used in this act, shall include all medicines for internal or external use. The term "food," as used herein, shall include all articles used for food or drink by man, whether simple, mixed, or compound.

Sec. 6. That for the purposes of this act an article shall be deemed to be adulterated—

In the case of drugs :

First. If, when sold under or by a name recognized in the United States Pharmacopœia, it differs within the knowledge of the seller from the standard of strength, quality, or purity according to the tests laid down therein.

Second. If, when sold under or by a name not recognized in the United States Pharmacopœia, but which is found in some other pharmacopœia or other standard work on materia medica, it differs within the knowledge of the seller materially from the standard of strength, quality or purity according to the tests laid down in said work.

Third. If its strength or purity fall below the professed standard under which it is sold.

In the case of food or drink:

First. If any substance or substances has or have been knowingly mixed and packed with it so as to reduce or lower or injuriously affect its quality or strength, so that such product, when offered for sale, shall be calculated and shall tend to deceive the purchaser.

Second. If any inferior substance or substances has or have been knowingly substituted wholly or in part for the article, so that the product, when sold, shall be calculated and shall tend to deceive the purchaser.

Third. If any valuable constituent of the article has been knowingly wholly or in part abstracted, so that the product, when sold, shall be calculated and shall tend to deceive the purchaser.

Fourth. If it be an imitation of and knowingly sold under the specific name of another article.

Fifth. If it be knowingly mixed, colored, powdered, or stained in a manner whereby damage is concealed, so that such product, when sold, shall be calculated to deceive the purchaser.

Sixth. If it contain within the knowledge of the seller any added poisonous ingredient or any ingredient which may render such article injurious to the health of the person consuming it.

Seventh. If it consist within the knowledge of the seller of the whole or any part of a diseased, filthy, decomposed, or putrid animal or vegetable substance, or any portion of an animal unfit for food, whether manufactured or not, or if it is the product of a diseased animal, or of an animal that has died otherwise than by slaughter: *Provided*, That an article of food or drug which does not contain within the knowledge of the seller any added poisonous ingredient shall not be deemed to be adulterated—

First, in the case of mixtures or compounds which may be now or from time to time hereafter known as articles of food under their own distinctive names, and not included in definition fourth of this section;

Second, in the case of articles labelled, branded, or tagged so as to plainly indicate that they are mixtures, compounds, combinations or blends;

Third, when any matter or ingredient has been added to the food or drug because the same is required for the production or preparation thereof as an article of commerce in a state fit for carriage or consumption, and not fraudulently to increase the bulk, weight, or measure of the food or drug, or conceal the inferior quality thereof;

Fourth, where the food or drug is unavoidably mixed with some extraneous matter in the process of collection or preparation.

Sec. 7. That every person manufacturing, offering, or exposing for sale, or delivering to a purchaser any drug or article of food included in the provisions of this act shall furnish such drugs or article of food to any person interested or demanding the same, who shall apply to him for the purpose, and shall tender him its value, of a sample sufficient for the analysis of any such article of food which is in his possession. And upon the presentation of such drug or article of food to the proper officer of the food division by a responsible person, with a request from such person for an official analysis of the same, the chief of such division shall make, or cause to be made, such analysis of the drug or article of food so presented, under rules and regulations to be prescribed by the Secretary of Agriculture.

Sec. 8. That whoever refuses to comply, upon demand, with the requirements of section eight of this act shall be guilty of a misdemeanor, and, upon conviction, shall be fined not exceeding one hundred dollars nor less than ten dollars, or imprisoned not exceeding one hundred nor less than thirty days, or both. And any person found guilty of manufacturing, offering for sale, or selling an adulterated article of food or drug under the provisions of this act shall be adjudged to pay, in addition to the penalties heretofore provided, for all the necessary costs and expenses incurred in inspecting and analyzing such adulterated articles of which said person may have been found guilty of manufacturing, selling, or offering for sale.

Sec. 9. That in prosecutions for violations of this act proof of the act done shall be held to imply knowledge and intent on the part of the accused, unless such knowledge and intent shall be disproved on the trial.

Sec. 10. That this act shall not be construed to interfere with commerce wholly internal in any State, nor with the exercise of their police powers by the several States.

The Adaptation of Artificial Limbs.

The improvements in artificial limbs have now reached such a point that it is often difficult to tell, from external appearances, whether a limb was furnished by nature or man. Amputations are being made every day, necessitating the use of an artificial limb, and in order that these substitutes shall be of the greatest possible service, it is necessary that the surgeon should know a little of their mechanism, etc., and be guided thereby, to a great extent, in performing the amputation. It must be honestly confessed, however, that this is a kind of knowledge in which the generality of medical men are sadly deficient.

At the recent meeting of the National Association of Railway Surgeons, a paper on this subject was read by

A. H. Garnett, M.D., and was published in *Med. News.* A brief abstract of it, dealing with the more important points, will be of value.

To begin with amputations through the shafts of long bones, an effort should always be made to avoid having the cicatrix on the extremity of the stump. When the cicatrix is situated on the end of the stump, it is exposed to some degree of traction, and being hard and nonelastic, it exercises pressure upon unyielding parts. As a result, there are frequently painful sensations and disturbances of nutrition and circulation. Below, as well as above the knee, the cicatrix should be placed posteriorly if possible. Where a choice is possible between the knee joint and a position immediately above or below, preference is given to disarticulation. The condyles should not be trimmed and the patella should be made to fit into the condyloid space, if it can be done without the probability of becoming displaced. When the operator must go below the knee, he should, if possible, select the junction of the middle and lower third, as this is the preferable site in considering the adaptation of an artificial limb.

In amputating through or below the ankle joint we should consider whether or not an artificial limb is to be worn. If an artificial limb is to be adapted, it must be borne in mind that Hey's, and Chopart's amputation through the metatarsus, leave the most troublesome stumps, and for the following reasons:

1. The natural length of the leg from the knee to the heel is retained, thus allowing no space for attachments or mechanism in the appliance.

2. All dimensions of the stump from the end to the articulation are either normal or increased, and, as the appliance must encase the stump, the diameters about and below the angle are necessarily very much larger than natural; this gives the apparatus an unsightly and clumsy appearance.

3. The stump will not permit a firm grasp, as the remaining bones and the nervous mechanism of the foot are such as to forbid continuous pressure. On account of this the ankle-joint articulation cannot be used; for, in order to secure an artificial foot to the stump, the pressure must be considerable.

In addition, the severance of the flexors causes a disposition of the amputated surface to point downward, which is only partially relieved by the division of the tendo-Achillis. Therefore, in amputations near the ankle the tibio-tarsal, Syme's or Pirogoff's method should be chosen, whenever it is in the power of the surgeon to decide.

In the thigh the most desirable point is the lower third. In performing amputations of the upper extremities, everything possible should be saved, for the best artificial substitutes are far inferior to nature's provisions.

After operation the surgeon should endeavor to leave the stump in the best possible condition for the manufacturer. He can crowd out the fatty tissue, and harden and solidify the stump, making it richer in blood supply, by a systematic process of tight bandaging, bathing, rubbing, etc. These changes should be brought about before the patient comes to be fitted for an artificial limb. It is true the pressure of the limb will itself bring them about in time, but the limb will be too large for the stump because of the shrinkage of the latter.

Finally, the artificial limb should be fitted as soon after perfect healing as possible, for without this the muscles become weak, undisciplined and atrophied.

A New Way of Irrigating the Nasal Cavities.

Dr. E. Pins (*Wr. Med. Woch. Cbl. f. Ther.*) has for some time endeavored to think of a method by which it would be possible to force fluids into the nasal cavities under a not too strong pressure, and to attain a shutting off of the upper pharynx or post-nasal cavities without external aid, with at the same time the least liability to danger by the entrance of the fluid into the ear or the other cavities opening into the nose. Observing the fact that in strong expiration with the mouth closed, the soft palate completely shuts off the nasal cavity, he made use of it in constructing an apparatus, which consists of a bottle with perforated cork, through which two glass tubes of unequal length pass. The longer tube, which passes to the bottom of the bottle, is furnished at its outer end with an olive tip which fits into the nose; a mouth-piece is attached to the shorter tube, through which the patient blows while the other tube is in the nose.

The bottle being filled with fluid, the expiratory pressure is sufficient to force one to two quarts of fluid through the nose in a short time, but is at no time so great, according to the author, as to involve the danger of forcing the fluid into the extra-nasal cavities. This did not take place in 400 applications of this method among 30 patients of the author.

The method finds its contraindications in diseased conditions of the respiratory and circulatory organs.

MEDICAL ITEMS.

Prof. Schmidt-Rimpler, of Marburg, has been appointed to the Professorship of Ophthalmology at Gottingen, vacated by Professor Leber, who has gone to Heidelberg. Professor von Hippel of Konigsberg has declined the invitation to come to Gottingen.

A Practical Sugar Test.—Nothnagel showed a handy test for sugar, which had been forwarded to him by Dr. Becker, of Cairo. It is simply a visiting card saturated with a solution of potash, over part of which is drawn a covering of the sulphate of copper, and the urine applied. The card is then laid on the globe of a lamp, when the saccharine urine will color the card brown, and this color will be the deeper the greater the amount of sugar.—*Med. Press.*

MARVELOUS IF TRUE.—It is stated that a Bohemian has discovered a combination of chemicals, by the use of which the hardest stones can be dissolved and molded into any shape, the "cast being as hard as flint, translucent, and capable of taking on a brilliant luster."

THE BRITISH MEDICAL ASSOCIATION is to open its meetings in Leeds on Wednesday, September 3, when Sir F. Abel will deliver his address as President. Following precedent, the British Pharmaceutical Conference will open on Monday evening, September 1.

THE PHOTOGRAPHS OF VIENNA STUDENTS.—By a new regulation recently made by the Senate of the University of Vienna, students on matriculating must present the Dean of the Faculty which they wish to enter with their photographs. These works of art will be used to indentify candidates when interesting questions as to "signing up," etc., arise.

THE ALVARENGA PRIZE of the College of Pysicians of Philadelphia, consisting of one year s income of the bequest of the late Dr. Alvarenga, of Libson, has been awarded to Dr. R. W. Philip, of the Victoria Dispensary for Consumption and Diseases of the Chest, Edinburgh, for his essay on pulmonary tuberculosis, which will be published by the college.

PERMANGANATE OF POTASH BATHS IN SMALL POX.—Dr. Galewouski, of Paris, reports that in the small-pox hospital at Brunn, Austria, baths colored with permanganate of potash are used for the treatment of small-pox. It is stated that after a short stay in the bath the temperature falls materially, the general health is improved, the pustules are resolved and recovery sets in.

A STUDENTS' AID ORGANIZATION AT PARIS.—M. Pasteur is the chairman of a committee, formed at the Sorbonne, for the purpose of encouraging foreign students to enter the University of Paris. It is proposed to assist strangers immediately upon their arrival in the city for the purposes of study, and to furnish gratuitously a kind of bureau of information and elementary advice.

THE PRODUCTION OF CINCHONA.—According to the *Bull. Med.* the production of cinchona bark in 1889 was as follows, in kilograms:

Ceylon,	5,300,000
Java,	1,800,000
British India,	816,000
South America,	385,000
Jamaica,	2,700
West Africa,	1,800

This amounted to 8,300,000 kilograms, and represents 224,000 kilograms of quinine, valued at 124,000,000 francs. From this it may be seen that South America, which was at first the only country producing quinine, has now fallen to fourth place.

DANGER IN THE PHONOGRAPH.—The Park Commission of Philadelphia has decided that Edison's phonograph is a danger to public health, from the possible contagion to be transmitted by the indiscriminate use of the lobes on the rubber tubes which are affixed to the ear of the listener, and also in the liability of the instrument to cause deafness; and they have banished the instrument from Fairmount Park.

PYRETICS.—As a contrast to the numerous *anti*pyretics recently introduced, another new substance deserves mention, viz.: tetrahydrobeta-naphthylamine, which has been found by Filehne to possess the property of raising the temperature of the body by several degrees. It is presumed that this compound, or others of the same nature that may be discovered hereafter, will be found of practical use in therapeutics.—*American Druggist.*

LEGAL'S URINE TEST IN TUMORS OF THE LIVER.—At the Vienna Surgical Society Professor Nothnagel recently showed a patient with a hard tumor in the liver. He applied Legal's urine test, and found it perfectly accurate. Legal's test solution is a mixture of the nitro-prussiate of soda, to which a solution of potash is added. If aceton be present in the urine when this is added the urine takes a dark red color, which is intensified when acetic acid is added. This test is said to be alone sufficient to prove the presence of a melanotic tumor.—*Med. Record.*

THE DOCTOR'S GARDEN.—The Wiscasset *Liliputian*, of Maine, informs its readers that Dr. C. Peaslee is pulling down his fence between his premises and the cemetery. It goes on to say, "the view from his residence will be much improved after the stones in the cemetery are righted up." The view must be delightful at all times, especially to a physician. The removal of the fence, too, suggests the air of common ownership, the graveyard being, as it were, the doctor's garden. The doctor who can look upon a graveyard and enjoy an easy conscience is invaluable in any community.—*Med. Record.*

ON A RECENT visit to Chicago we enjoyed the bountiful hospitality of that prince of entertainers and phenomenon of versatility, Dr. G. Frank Lydston. Under his protecting chaperonage we were enabled to penetrate with impunity the wilds of the Windy City, to brave the unholy chiefs of the White Chapel Club, e'en in the depths of their dark and ominous den, and later, with more propitious surroundings, to meet some of the founders of a society now in the incipient stages of incubation, but predestined to dine with the effulgence of scientific substantiality, the erstwhile luminous orbs of the northern medical heavens.

Chicago is a great city, and having won it, well deserves the distinction of being delegated to show the world the extent of its progress in '93.

Virgin Modesty.—A Sister of Charity had a tape worm. "When we have what we cannot love," says the proverb, "we must love what we have." But the nun and the proverb differed in opinion. The expulsion of the anchorite was decided on. A physician was called in and prescribed kousso, that Fourth of July for tape worms, but alas! the kousso failed. "Ah, Sister! "said the physician to the *religieuse*, "when kousso fails we must use the *male fern* on you." The nun blushed scarlet, and timidly made answer: "The *male fern*! Heavens! In that case, doctor, I must have a special dispensation from our Bishop!"—*Lancet-Clinic.*

Ointment for Syphilitic Eruptions.—The *Medical Free Press* says that there was in use in the Lock Hospital an ointment for erythematous, papular and scaly syphilitic eruptions, which on account of its rapidly curative effects used to be called by the patients the "magic cream." The composition was as follows: One part of ammoniate of mercury and three parts of oxide of zinc, mixed and rubbed into a fine powder, with sufficient glycerine and lard to make a stiff cream. A few drops of olive oil facilitates the mixture of all these. It is really astonishing how a few applications of this will make a very perceptible rash disappear in a few days. A very ready method of preparing the above is by mixing one part of the ammoniated mercury ointment with three parts of zinc ointment, each being fresh, and adding a little glycerine.—*N. W. Lancet.*

Medical Inspection of Immigrants by Consular Physicians.—It is stated that the United States Marine Hospital service has decided to establish physicians at every port in Europe from which immigrants embark to this country. These physicians will work under the supervision of the United States Consul at the port where they are stationed. It will be their duty to examine immigrants intending to sail for this port, and to prevent the embarkation of the great army of the lame, the halt, and the blind who for years have been pouring into this country, only to fill up the county and State pauper institutions. Particular attention will be given to rejecting people suffering from contagious diseases and all affections of a scrofulous nature. The plan proposed has been successfully carried out in connection with the Marine Hospital Service in West Indian and South American ports, and the effect of this protection to the United States in the exclusion of contagious diseases is considered inestimable by the members of the service. Thus, while yellow fever is raging at Santos and Rio Janeiro, Brazil, there is very little danger of its getting into New York, even in the summer season. In connection with this work, the European consuls are expected to also make examination, particularly with regard to criminal cases and those who claim to be citizens of this country. If the candidate proves to be actually a citizen, the consul will issue to him a certificate. It is understood that women about to become mothers will also be included in the class to be kept from embarking.

Medical Missions.—At a recent meeting in London the subject of medical missions was discussed. One of the speakers, a veteran official from India, stated that among the Asiatics no mission can be regarded as fully equipped unless it has a medical department. Medical skill is extremely important as a pioneer influence, and a physician will be able to establish a mission where others would fail to obtain a footing. The Indian government highly appreciates the work that has been done by the medical men who have gone among the wild tribes along the northern frontiers. Traders know of all these posts, and frequently travel a long distance to obtain medical assistance.

In January, 1879, a very warlike tribe on the frontier made a raid on Tonk, which is in British territory. The place was sacked and burned; but the hospital and the house of the medical missionary were spared, because half of the patients that had been treated there were members of the attacking tribe.—*Med. News.*

SOCIETY NEWS.

AMERICAN RHINOLOGICAL ASSOCIATION.

We are informed that the American Rhinological Association will hold its Eighth Annual Session at Louisville, Ky., Oct. 6, 7 and 8.

All leading subjects relating to Nasal and Naso-Pharyngeal diseases will be opened for discussion by a leading fellow of the Association. The medical profession is cordially invited to attend.

The Secretary, Dr. R. S. Knobe, Omaha, Nebraska, will furnish any information to physicians desiring to become members.

SELECTIONS.

THE MODES OF ADMINISTERING CARDIAC TONICS.

The therapeutics of cardiac affections have been greatly advanced recently, not only by the addition of numerous cardiac tonics to our list of remedies, but also by the acquirement of important details in the administration of the older remedies, by which their efficiency has been greatly advanced.

Gauthier, especially, has devoted himself to the study of this subject, and an analysis of his work, as published in the *Wiener medizinische Blatter* of May 22, 1890, is well worthy of notice.

As is well known, the administration of digitalis in the form of powder or pill is apt to produce vomiting or diarrhœa. The best form is that of an infusion made by macerating the digitalis leaves, and, when time permits, it is this preparation which should always be used as the one which gives the most prolonged and intense

action on the heart, and which is most efficacious in producing diuresis. The infusion should be given in gradually decreasing doses. Digitalin is by no means a constant preparation, and it does not possess all the properties of the digitalis leaves. Nevertheless, the crystallized digitalin is of use where an extremely rapid action is desired, although ordinarily its action is too intense, and, therefore, dangerous, while its subcutaneous employment is extremely painful, and often produces abscesses.

Convallaria is also best employed in the form of an infusion, 8 to 10 parts being macerated in 1000 of water, to which syrup may be added, and administered the day on which it is made.

Convallarine, the active principle, may be employed in doses of $^1/_6$ to $\frac{3}{4}$ or $1\frac{1}{2}$ grains.

Strophanthus is best given in the tincture (the one officinal in the English Codex being the best) in 5-drop doses three times daily, although 10 to 20 drops may be given once or twice in the 24 hours in a single dose.

Adonis may be employed in the form of an infusion or decoction, or its active principle, adonidine, may be given. The infusion seems to be inconstant in its activity, and both of the watery preparations have an extremely bitter taste, which must be masked by syrup. Adonidine may be given in the quantity of from $^1/_6$ to $^1/_3$ grain in 24 hours. Its toxic action is ten times greater than that of digitalis. Caffeine is likewise a reliable remedy, provided it is given in sufficient dose, 15 to 30 grains being ordinarily required. This dose should, however, not be exceeded without great care, as in large quantities it is not free from danger.

The salts of caffeine are nearly insoluble in water, and are, therefore, not suitable for subcutaneous injections, although the double salt—the benzoate of sodium and caffeine—is an exceedingly valuable preparation. Sparteine may be used, either in the form of an infusion or decoction of the plant; or its active principle, sulphate of sparteine, may be employed, the latter being especially valuable for its action on the heart in doses of from $\frac{3}{4}$ to 4 grains, while the infusion possesses marked diuretic properties.—*Therap. Gaz.*

THE TREATMENT OF UTERINE CANCER.

Mr. F. B. Jessett writes (*Brit. Gyn. Jour.*, May, 1890) upon the treatment of cancer of the uterus as follows:

Palliative treatment is adopted in cases of advanced disease. By means of it much may be done to relieve suffering, to arrest the rapid progress of the disease, and to improve the general health. The vagina should be thoroughly syringed with "sanitas" or some other antiseptic lotion through a full-sized speculum; then, with pieces of cotton-wood, the cavity should be wiped out as far as possible, removing all debris and loose sloughs; a tampon of cotton-wood soaked in equal parts of pinus canadensis and glycerin, or smeared with an ointment composed of one ounce of sanitas oil, ten grains of chloride of zinc, and an ounce of vaseline, should be introduced into the cavity; this should be used night and morning, the vagina being syringed out each time, and the cavity wiped with cotton-wool before the insertion of fresh tampons. By adopting this simple plan of treatment the sloughs become dislodged and a clean ulcerated surface exposed. All offensive smell will disappear, and the pain and vesical irritation be much decreased. The disease will be considerably retarded in its growth, the patient's appetite returns and the general health improves, doubtless owing to the non-absorption of the poisonous discharge. Perfect rest should be insisted on, and the general health attended to by the administration of appropriate tonics; and if pain is present and prevents sleep, small doses of morphine may be advantageously given. It may be added that no success has attended the use of any drug given for the purpose of arresting the disease.

In attempting a radical cure the case must have been seen early, while the uterus is still freely movable, and before the vaginal walls have become involved. When the vaginal portion of the uterus is alone affected, amputation of the cervix by means of scissors is recommended. Caustics in this, and other forms, are unreliable

When cancer involves the cervical portion of the canal, the disease should be removed by cutting away a conical portion of the uterus beyond the disease. This method the author prefers to the total extirpation of the organ—an operation which he cannot at present bring himself to adopt. Total extirpation may, however, be performed in suitable cases when disease in the body of the uterus has been early recognized. In removing the conical portion the operation closely resembles the high amputation of the cervix. The vagina around the cervix is snipped with blunt-pointed scissors, and the vaginal mucous membrane and tissues beneath pushed up as far as possible. The uterine tissues are then divided by short snips with the scissors, the part to be removed being, at the same time, firmly pulled down by a vulsellum. In this way the diseased tissues may be removed, even to the fundus.—*Med. Chron.*

MORPHINOMANIA AND COCAINISM.

Dr. F. S. Clouston summarizes his observations in regard to morphinomania as follows: (1) The habitual use of opium is, in nine cases out of ten, most injurious to the higher mental powers, and more especially impairs the volition. (2) The dose has to be steadily increased till such an amount is taken as tends to impair nutrition and the trophic energy of the brain, to disturb the appetite and the whole alimentary system, and ultimately to destroy the power of natural sleep. (3) The craving set up by such excessive use of opium is one of the most persistent, intense and difficult to resist of any known morbid cravings. It has no remission or periodicity in it. (4) The nervous constitution of the patient

has very much to do with the inception of the habit. It may be said generally that persons of the nervous diathesis, of nervous or insane or drinkers' heredity, all persons who feel and dread pain excessively, and most "excitable" persons are especially liable to acquire the craving. (5) Given or taken for insomnia or to relieve pain, is the origin of most cases of morphinomania. (6) It behooves medical men to take the constitution of each individual patient carefully into consideration before opium is prescribed, and to ask: "Is there any danger of a habit being set up?" (7) As to the treatment of morphinomania, I have little hesitation in laying down its principles: Help from without in the shape of skilled, strong nursing; control and never remitting companionship are needed in almost all cases. It is better and safer to undergo the short Hades of absolute stoppage than the more prolonged purgatory of tapering off. While this is being gone through, use the bromides, wines, every form of beef and peptonoids that the stomach or the rectum will retain; bismuth, ice and counter-irritation for the gastric pain and vomiting; digitalis and strophanthus for the weak aud irregular heart's action. I should now use paraldehyde or sulphonal to get sleep for a few nights, but I should not go on for long with them. If there is emaciation, I should try Dr. Playfair's recommendation of massage, though I suspect some of the good effect in his cases resulted from the control of the massage nurses, and the taking up of the patient's mind by the details of the process, and the assertions that would be dogmatically dinned into their ears as to its unfailing efficacy. The great things to aim at are good nerve tone, firm muscles, a brown sunburnt skin, steady occupation, as much fat as can be put on, a sound moral sense all round, strengthened inhibition, and a dominating conviction that the drug is poison in any dose, and under any possible circumstances whatever. In relation to cocainism, Clouston says: (1) Cocaine is the acutest and the most absolute destroyer of inhibition, and of the moral sense generally, that we yet know. (2) The morbid craving is very intense and control is absent. (3) The drug requires to be increased faster than that of any other such drug to get the same effect. (4) The delirium and hallucinations of all the senses of single doses become chronic in cocainism. (5) Its immediate effects are more transient than other such drugs, but this does not apply to the craving set up. (6) The treatment of cocainism consists in outside control of the patient, in stopping the drug at once, in careful watching—I should not trust a patient under treatment as regards suicide for the first week—nursing, the use of every sort of food that will keep up the strength, and of the bromide of ammonium, brandy or wine, tea and coffee, and possibly a hypnotic, like paraldehyde or sulphonal, for two or three nights at least. (7) A patient suffering from cocainism can usually be certified as insane so far as the presence of delusions is concerned, but he gets over these so soon, and yet is so far from the real cure, that certification and sending to an asylum is not a satisfactory process altogether. We need cocainism included in any special legislation for dipsomania.—*Edinburg Med. Jour.*

SOME OF THE EFFECTS OF COLD ON THE HUMAN BODY.

M Fere has studied the subject and obtained the following results:

1. Simple exposure of the naked body to the air at a temperature of from 18° to 20°C. suffices to induce within several minutes an augmentation of pressure in the radial artery, which may amount to from 200 to 300 grammes at the end of ten minutes. The increase takes place even when the pressure is as high as 800 to 900 grammes. This fact explains why sudden exposure to a low temperature is apt to lead to rupture of the blood-vessels that have been previously altered. The augmented pressure thus determined explains also the occurrence of epilepsy subsequent to exposure to cold. Among the physiological phenomena caused by exposure to cold the author mentions the occurrence of considerable supersecretion from the axillary sudorific glands; this is so marked in some cases that an actual stream of sweat is set up. The fact is of importance with reference to the question of the sudorific axillary secretion that is considered to depend upon electrical excitation of the rhachidian and costal regions. The author has not succeeded in obtaining, by the same means, the secretion of sweat in the axilla, if care was taken to avoid exposure of a considerable area of the skin. This supersecretion, after the author, goes to show also that the reflex vaso-constricting influence of cold is not so general as is supposed.

2. Epileptic patients have been observed to be enabled to avert an epileptic fit by swallowing quickly a glass of cold water just at the beginning of this premonitory obnubilation; this means proved to be fruitless when it was too near the period of loss of consciousness. The following observed phenomena are given as an explanation to account for the above effect: By means of Bloch's sphygmometer the patient's arterial pressure during the normal state has been ascertained to be from 800 to 850 grammes; after the sudden ingestion of twenty-four centilitres of ice-water, the arterial pressure amounted to from 1,050 to 1,200 grammes. Within a period of from five to six minutes after the ingestion of liquid the pressure returned to the normal standard. The augmented arterial pressure has been observed to be less in case the same quanity of cold water is ingested in divided doses.

The augmentation of the surface blood-pressure is explained by the constricting action of the cold on the abdominal vessels. The occurrence of syncope and other accidents under the influence of ingested cold is presumed to depend upon a possible reflex constriction of the encephalic vessels.

Assuming that the increased blood-pressure constitutes one of the physiological conditions of an epileptic discharge, it is questioned if the artificial induction of high blood-pressure, as is the case in ingesting cold, does not act by substitution, causing at the same time a partial spasm capable of interfering in due time with the epileptic discharge.

By subjecting one hand to a temperature higher than the surrounding, and so determining in that hand a greater amount of blood, M. Fere has been successful in realizing the counter-proof of the fact that, in general, psychomotor excitations, or depressions, are characterized respectively by an augmentation or diminution of the energy of voluntary movements, and shortening or lengthening of the period of reaction.—*N. Y. Med. Jour.*

When shall we use Hypnotics? In acute disease, particularly fevers, sleep is often a necessity, reducing the activity of the heart, removing more waste, and quieting the general excitability of the nervous system. In chronic disease there is frequently the same temporary need. In incurable disorders with pain and discomfort, in the restlessness of senility, hypnotics and narcotics —and used freely in the last years of life—are almost the chief justification of our service. Often in mental disease they are, for a time, all but indispensable. In some neurotic people their occasional use can hardly be avoided. In acute nervous and mental disturbance from profound shock, full and continued doses of narcotics may dispel most threatening symptoms. The individual must, of course, be taken into consideration. Many can be depended upon to use hypnotics only as directed by their physician; others can no more be trusted with them than certain persons with alcohol. Something of slight intrinsic hypnotic value may be intensified by its mental effect, and I am sometimes deliberately asked for a prescription upon which to build a mindcure. It is often imperative to prescribe a hypnotic, where it is best that a decided hypnotic effect should not be got. For this purpose a somewhat unpleasant drug is better than an altogether agreeable one, and the prescription which I use consists of a few minums of paraldehyde in a drachm of chloroform water This can be repeated in the night several times, and be continued without harm.

In some conditions, even with acute maniacal symptoms, it is better to let the patient lie awake almost absolutely for two or three nights than give the amount of narcotics necessary to produce sleep.—Dr. Folsom in *Boston Med. and Surg. Jour.*

Antiseptic Properties of Resorcin.—Leblond and Baudier state the following conclusions:

In diphtheria it is to be used in the strength of 15 grains in one ounce of glycerine, brushed over the pharynx every hour. When the larynx is not invaded, they claim the disease will be arrested in 6 to 10 days.

Whooping cough—After 10 or 12 days' medication the number of paroxysms is reduced to 4 or 5 in twenty-four hours, and the bronchial irritation disappears. It has rarely happened that the total duration of an attack treated by resorcin has exceeded five weeks.

Pulmonary tuberculosis—In subacute cases of this affection in two weeks' time the sweats disappear, the fever abates, the vital forces and energy return. By continuing the treatment they have been able to keep most of their patients in a satisfactory state for from one to six years. In acute cases, or where the disease is much advanced, they only obtained temporary remissions. In this and the preceding the medicament is used in the form of fumigations of one gramme each every two hours in whooping cough; in phthisis it is kept up constantly, so the patient is enveloped in an antiseptic atmosphere.

Chancroid—Here it is is applied locally in the form of powder, modifying the surface in five or six days, and transforming the ulcer into a simple wound, which is entirely healed by the twentieth to twenty-fifth day. —*Jour. de Med.*

Rapid Cure of Erysipelas by Ergotine.—Dr. Geo. C. Kingsbury (*Brit. Med. Jour.*) says: For erysipelas, like most other painful diseases, hosts of remedies have been suggested, and ever since Hueter discovered cocci in this particular ailment all sorts of germicide applications have been tried, with and without success. The most recent favorites are carbolic acid, ichthyol and creolin. Without wishing in the slightest to underestimate the value of these agents, I would like to call attention to what has been my invariable treatment for at least five years. In every case I have used ergotine applied with a camel-hair brush to and around the affected area, and have found it a painless, rapid, and almost certain cure; in fact, I cannot recall a single case in which it has disappointed me. It is best used in the form of a 50% solution in distilled water, painted on frequently. Generally one or two applications suffice to diminish all feeling of tension, and it is rarely that the pain is not quite conquered in twenty-four hours, leaving the patient comparatively well. In many cases I have relied solely on the ergotine, not prescribing any internal medicine.

In writing this note I have no desire to be thought original, for I saw the treatment recommended in some medical paper of about the year 1884 or 1885, but I cannot lay my hands on it now, and fear the treatment has not had a fair trial, as I never hear of its being adopted. Neither do I pretend to explain the action of the ergotine, but the effective way in which it cuts off the excessive blood-supply to an overvascular area naturally suggests its trial in other passive congestions, and in these also I have found it very useful.

In the Year-Book of Treatment for 1890, p. 255, I find it stated that Dr. F. Nesterovsky described two cases in which he has used a mixture of "extractum secalis cornuti" and glycerin with success, the temperature becoming normal in six days. This encourages me to ask for a fresh trial of ergotine, which I have found in not fewer than 30 cases to practically cure in one day.—*Jour. Am. Med. Assn.*

Uterine Vomiting Independent of Pregnancy.—Much has been written of late years on the subject of the vomiting of pregnancy and its most aggravating form, hypermesis gravidarum or uncontrollable vomiting. Dr. P. Lamy has recently written on cases in which troublesome vomiting has been observed as associated with other phenomena of the female generative system besides pregnancy. He began with a case of vomiting at puberty. A girl, æt. 14 years, suffered severe pain before her first period. After that period the pain ceased, but an attack of vomiting followed every meal. No drugs were of any avail, and the patient had to be fed with a drachm of beef tea every half-hour. When the menses became regularly established the vomiting ceased, and did not return during the first pregnancy six years later. Dr. Lamy related two obstinate cases of vomiting during the period in adult women. In one, vomiting invariably followed sexual intercourse. The patient became pregnant, but after she bore a child the vomiting always returned under the same circumstances as before. Treatment proved unsatisfactory. Lastly, Dr. Lamy noted a case of vomiting at the climacteric. The patient was 50 years old, the period was becoming very irregular, and occasional disturbances of the alimentary canal, especially vomiting, set in. Treatment, as in ordinary dyspepsia, gave relief. This last case might be explained by many physicians as simple gastric catarrh, due to errors in diet or other causes, rather than to changes in the uterine functions. It is clear that the vomiting of pregnancy is very common and almost normal, in the sense that a certain amount of hæmorrhage at delivery is normal. On the other hand, vomiting at puberty, during menstruation, after coitus, or about the menopause must be considered abnormal.—*Med. Rec.*

Exhibitionism; A Sexual Perversion.—M. Magnan has recently presented to the Societe de Medecine Legale the history of two cases showing that variety of sexual perversion not infrequently observed among men living in cities, known as "exhibitionists," or those having the propensity to expose their genitals in public places or to individuals, usually women, whom they meet in unfrequented places. According to the report of these cases in *Progres medical*, one of the subjects presented unmistakable hereditary defect, and both showed present typical degeneracy. The author classes these persons with the kleptomaniacs, the pyromaniacs, and the suicidal and homicidal insane. These degenerate beings are ordinarily a great trial to the police and are exceedingly shrewd in the avoidance of arrest; but imprisonment has little deterrent or reformatory influence upon them. They are seldom persons who have a steady form of employment. It is probable that they are psychically incapable of acquiring a regular trade or business or of applying themselves to its pursuit.—*N. Y. Med. Jour.*

USEFUL FORMULÆ.

The Treatment of Flatulent Dyspepsia.—In *Les Nouveaux Remedes*, April 8, 1890, Dr. Huchard publishes a number of formulæ, which are claimed to be of value in the treatment of dyspepsia, especially with a view of preventing the development of flatulence. Among the remedies which the author has found most satisfactory, chloroform is the best. On account of its irritant action it should not be given in a state of purity or in capsules, as is so frequently done. The best mixture is claimed to be its administration in saturated chloroform water:

℞ Saturated chloroform water, 150 parts.
Distilled water, - - 120 parts.
Mint-water, - - 30 parts.

Of this mixture a tablespoonful may be taken either immediately before or during a meal.

The same dose may also be taken of the following formula:

℞ Saturated chloroform water, 140 parts.
Orange-flower water, - 150 parts.
Tincture star anise (*illicium anisatum*), 10 parts.

In the following preparation the chloroform is associated with gastric stimulants:

℞ Tincture of gentian,
Tincture of anise,
Tincture of nux vomica, aa., · ʒj
Chloroform water, - 20 to 40 drops.

After filtration, 10 to 20 drops of the above may be taken in a little water a quarter of an hour before eating.

When it is desired to employ the so called absorbing powders the following formulæ may be prescribed:

℞ Powdered charcoal, - - - ʒij.
Sodium bicarbonate, - - ʒj½
Calcined magnesia, - - - ʒj.
Powdered colombo, - - ʒss.

Mrke 40 powders. One powder may be taken half an hour or an hour before, or, if an antiseptic action is desired, at the time of eating:

℞ Beta-naphthol,
Salicylate of bismuth,
Magnesia, aa gr. iv.

Make 30 powders, which may be administered as above.—*Therapeutic Gazette.*

An Injection for Fistulæ.—The following is recommended as of much service in promoting a cure of fistulous tracts:

℞ Camphor, - - - ʒj.
Salol, - - - ʒss.
Ether, - - - ʒj.

—*Med. Record.*

Chronic Tonsilitis.—

℞ Tannin, - - - - gr. xij.
Tr. iodi, - - - - gtt.ij.
Glycerinæ, - - - - - ʒss.
Aq. dest., - - - - - ʒj.

M. Sig.: Apply many times a day.—*Ibid.*

ORIGINAL ARTICLES.

THE MEDICO-LEGAL ASPECT OF INEBRIETY.

BY J. A. DE ARMAND, M.D., DAVENPORT, IA.

Read before the Scott County, Ia., Medical Society.

At the 1889 meeting of the Illinois State Medical Society, the president delivered an address in which he alluded to the necessity for adequate punishment of the very large class of criminals whose only excuse is that the crimes were committed while under the influence of liquor. In times agone it has been held to be good police regulation, as well as equal justice to obeyers and breakers of law, that if a man commits a crime the fact that he was intoxicated at the time shall not excuse the act or ameliorate the punishment of the crime. The argument of the address was in support of the wisdom and justice of this position.

During the last few years there has been presented a view in regard to inebriates which is almost diametrically opposed to the views commonly held and upon which our criminal laws are largely built. This new view of inebriety takes the position that a man who has for any length of time indulged in strong drink becomes unable to resist the temptation to drink, and not only this, but he also loses more or less of that mental stability whereby the acts are reasoned out. In other words, he becomes *non compos mentis* and should not be held liable for his acts; that is, he should not be made amenable to the laws of the land for his wrong doing. Nor does this new theory stop here. It avers that the offspring of parents, one or both of whom have been abusers of alcoholics, may and do inherit minds unbalanced and natures incapable of judging right from wrong and wholly unable to govern their appetites and desires. Now notice the effect of the adoption of this new view of inebriety. A very large percentage of criminals are inebriates. If we eliminate from the criminal class all the inebriates whose love of drink has brought them before the bar of public justice, you will have left a very small crowd. Then if you admit that every man who indulges in ardent spirits and can point to an ancestry of inebriety, even remote, and thereby establish a valid plea of mental unaccountability or insanity, you might as well abolish all criminal laws, for not one criminal in a hundred should be held accountable for the crime.

Punishment is not alone made and established for the criminal. The mere act of strangling a murderer will not in the least affect the murdered man, nor will it affect the friends of the deceased, but it has a deterrent effect. If every man who sheds the blood of his neighbor was satisfied that he would expiate his crime on the gibbet, then would there be less murders committed. So it is that every excuse you offer for the criminal is an excuse for the evil-doing. The effect of the adoption of the theory of mental unaccountability is the strongest sort of an apology for the acts of the criminal. It also puts a premium upon drunkenness. It is an established principle of criminal law that every man is innocent until he is proven guilty. The burden of the state in every case is to establish proof of guilt, for without proof the accused is innocent before the law. Now it is only natural, on the other hand, that every man is regarded as sane until he is declared insane. To establish insanity proof must be adduced, and since the grades, forms and manifestations of insanity are multitudinous, it is evident that insanity may and often does become a point for close discrimination.

The new theory of unaccountability of inebriates enlarges the scope and tends to extend the field of insanity so that it at once becomes the great medico-legal question in point of interest to which all others pale into insignificance. Criminal practice assumes a new form in our courts, and when it is remembered that it is a very poor lawyer indeed who cannot scale the average family tree and not find a limb that suffers from some shortcomings in his handling of ardent spirits, we can hazard an opinion as to the status of criminal proceedings in the future.

According to the new theory, every man who can show a record of debauchery, drunkenness and vagabondage, is presumably insane, and if he has been intoxicated for any considerable time, and has been crossed in love, or has had real or imaginary liberties abridged, he is not capable of distinguishing right from wrong, and if he kills a man he is not accountable for it. This theory is so thoroughly at variance with common sense that it hardly seems worth the while to consider it, but let us follow it out to the end and see where it will lead us:

If to this man's history is added a record of inebriation on the part of one or both of his parents, you would have what the theorists regard as an awfully fine case of insanity. But if you want to make the case still stronger, look up the man's youthful history. Find if you can that he had a convulsion or two at a remote date, that he was a morose child—when he could not rule the roost; that he refused to go to school—because he was punished for idleness; that he associated with low companions—because good boys were kept from him; that he wanted to marry a lady of refinement and being refused never afterward manifested any interest in the sex, and so on. All these things would have wonderful weight in establishing the man's insanity, and the men who are horrified that villainous brutes are legally strangled, who aver that to hang a man whose crime is so revolting to all mankind alike that the very details are omitted by reputable family papers, is barbarous, even these men detect insanity in spots and would confine such men in mad-houses until experts detect no morbid symptoms, which would be when the whiskey was all out of them, when the culprits would

again be turned loose to murder and steal and escape just punishment.

And this brings up another aspect of the case. The one thing that has brought more odium on the medical profession than all others combined, is the vagaries and ambiguity of the medical expert. It has come to be accepted as a fact that money can and does get professional experts to establish almost anything nowadays. You can get eminent men who will demonstrate that human hair and blood are distinguishable from those of the animals, and just as eminent men who will aver that they are not. To open up the insanity field as enlarged by the new plan would be to still further make expert testimony the laughing stock of the world. The insanity plea would displace all others. The man who could show an ancestry of intoxication would hardly need any counsel at all. All that would be necessary would be to establish the claim, and that there was or might be nervous deficiency would follow, and no crime, however atrocious, but would, by this new and alleged scientific legerdemain, become an act whereby sympathy ought to be divided between the unfortunate who lost his life and the criminal who could not help committing the crime.

This is an age of advancement. It is an age of discovery, invention and investigation. With the filling up of our country competition becomes more active; all lines of trade and professions and callings of every sort feel the effect of active competition. Men engaged in any enterprise feel the need of careful attention to details in order that the yearly ledger will show a balance on the right side. At the same time business is carried on at a rapid rate. The easy, careless way of conducting business, or rather of letting business conduct itself, common to old countries, would, if followed here in our New World, land a millionaire in the poor-house in short order.

This rapid life makes men prematurely old. It makes men nervous, and instead of gout, the natural inheritance of high living, we have dyspepsia and nervous disorders. Sleep is reduced to the smallest limit, while eating is made a necessity and the time for it is reduced to the smallest limit. This sort of life means early decline and exhaustion. The exhaustion finds a ready and cheap remedy in alcoholics. Then it is not strange that so many drink. The poor man encumbered by a family he cannot care for and educate finds relief from his fears and sorrows in the spirits that cheer and it matters not what else. The business man who finds that trade is so slow, and interest, rent and taxes so high, soon learns that momentary happiness and forgetfulness, at least, can be had in the drawn-blind establishment next door, and he secures it. The farmer, who has worked so late and early, and yet finds that diamonds are on the free list while all that he needs is taxed, who seldom finds big crops but always big expenses, discovers surest solace from all life's cares in the foaming beer. There is nothing remarkable about this state of affairs. It is the natural and legitimate result of our mode of life and our way of doing business. Much as we may deplore the tendency of the age it will not better matters to remain blind to facts or to misconstrue the tendencies of the times. Laws enacted to counteract this tendency have always and everywhere been failures in proportion to their unreasonableness and impracticability.

And this new theory affords too much excuse for the shortcomings of inebriates. The sentimental shifting of the wrong-doing upon the shoulders of another, and the effort to punish the wrong man, cannot help matters any while it is certain to beget disrespect for a law that is unreasonable because not possible and wholly inadequate.

In criminal matters it is and should be the criminal who should be punished. It is a crime against decency, order and good citizenship for a man to get drunk, and he should be punished for it. Put such a man in the work-house and let him suffer the pain of his folly and wrong-doing. Sentimentalists who shed so many easily drawn tears over the failures in saving men who are not worth the labor put forth in their behalf, say that families would be left to suffer during the incarceration of the father. To this it may be said that said families sooner or later become subjects of public or private bounty anyway, and it could at least be said that the helpless family would not be made more helpless by enlargement.

The hereditary theory of drunkenness is largely padded when it assumes that the children of inebriates are most likely to inherit appetites they cannot control. It is safe to say, and I believe the experience of my auditors will bear me out in the assertion, that the inheritance of the morbid appetite for ardent drinks is no more likely than the inheritance of ungovernable sexual propensities by the children of parents whose lives, one or both, were largely given to sexual freedom, and yet nobody thinks of offering any such excuse for the transgressions of the moral code. There are women on the police rosters of every large city in the country who can no more live a life of virtue than they can fly, and yet when these same women are punished for their wrong-doing it is proposed to excuse the drinkers and wrong-doers because, forsooth, they may have certain nervous deficiencies as matters of inheritance.

To those whose knowledge and study have enabled them to intelligently compare and estimate the relative mental incentives which actuate the votaries to satisfy a vegetative craving and to appease a craving which is a mental demand as well, the result is not a matter of doubt. The moral effect of one may affect a different surface of society, but it is both and all that fill jails and penitentiaries and homes with sorrow and grief. Future investigation may discover the causes of mental inability to resist impulses which are bad, but it is not likely since most impulses arise from a desire which does not depend upon degenerate nervous organisms so much or so likely as upon a vagabond tendency which

our devoutly inclined friends would easily recognize as the old Adam which is in us. Few men drink because of the love of the taste of liquor—it is the effects they are after. The boozy feeling in which the devotee of whiskey finds himself after indulgence is what he is after, for in it the poor man is rich, the old man young, the sad man gay, the coward courageous, and all alike are at rest with care and trouble, while on the rough sea of daily travel there never comes a wave that is not laden with bright hopes and fragrant memories.

In conclusion, let us glance at the natural and legitimate conclusion to which all that is tangible of the new theory tends. If the children of parents, one or both of whom are users and abusers of alcoholics, are likely to have nervous organisms defective in the very necessary direction of resisting the control of the will or of being unable to distinguish right from wrong, a sort of mental color-blindness if you will, which latter, by the way, is idiocy and nothing else, then it would not be bad logic to say that since children may be so constituted the excuse should cover the group and not the transgressor alone. If, in short, there is a nervous deficiency which renders natural mental action impossible, the possessor is insane. Furthermore, if such nervous defects are not remedied before puberty there can be no reasonable hope for such after that period. Then the mad house opens its yawning chasm to evil-doers, which is another way of saying that insanity is accountable for pretty much all evil-doing.

For my part, I fail to see the reason for the new theory which would render responsibility uncertain and personal accountability a matter of family history. To my way of looking at the matter, the mental shortcomings of the children of inebriates can be much more naturally attributed to the lack of education and of that home influence which stamp themselves into the child's being so indelibly that they form part of the future man. "Education makes the man and the want of it the fellow." Instead of offering excuses for the man whose appetite for drink not only ruins him but deprives his children of a fair start in the great race of life, he should be punished and the State should educate the children. The boys and young men who make the criminal class are the idlers and the loafers. Develop the mind; compel attendance at school. The end will crown the effort and the work will be more easily accomplished than if we whose callings take us where the evil effects of strong drink are more clearly shown spend our time in devising new schemes to account for one of the greatest and most deplorable conditions of society.

The Progress of Cremation.—Cremation seems to be making rapid progress upon the Continent. The crematories at Milan, Gotha and London all report an increase in the number of incinerations, while that in Paris heads the list with 532. A cremation society has recently been organized in Stockholm.

PRURITUS.

BY HENRY REYNOLDS, M.D., CHICAGO, ILL.

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Gentlemen.—In our study of skin diseases thus far we have considered almost exclusively diseases characterized by what are known as objective symptoms—symptoms visible to the eye of the examiner, known as lesions, constituting in fact an eruption. To-day we desire to enter into a consideration of a disease wherein these objective symptoms are entirely wanting, a disease characterized only by subjective symptoms or those experienced by the feelings of the patient. The diseases occurring under this class are generally designated as neuroses, and we have amongst them the condition known as pruritus and certain other diseases characterized by a disordered sensation of the skin. To-day, however, we shall confine our remarks to that particular neurosis of the skin known as pruritus.

In pruritus the sensations or symptoms are those chiefly of itching. We may also have a creeping or crawling sensation of the skin, but the predominating symptom in this disease is itching; in fact, the word pruritus in dermatological nomenclature is used to designate itching. It is sometimes employed to specify that particular symptom in certain eruptions, but in this connection we use the term to signify a disease characterized by the sensation already referred to. The affection in one form or another is frequently met with. It may occur at any age in life and in either sex, but it is most frequently met with during adult life, and up to old age. We have one particular form of pruritus that is peculiar to old age. The disease may be confined to certain localities of the body, or may appear more or less universally distributed over the surface, and hence we have various manifestations of the disease giving rise to different names which designate these various forms or manifestations. When the disease is confined to the region of the anus it is designated as pruritus ani; when confined to the region of the vulva it is called pruritus vulvæ; when occurring in individuals advanced in life the disease generally assumes a universal form, and is usually termed pruritus senilis. We have another form of the disease which assumes a universal type, which occurs usually in the cold months of the year, and which has been designated as pruritus heimalis, which is probably the most frequent form of the disease mentioned, so far as the general manifestations are concerned. These subjective sensations or symptoms which characterize the disease may be constant or intermittent. Almost invariably, however, the itching is found to be worse at night than it is in the day time. Certain cases of the disease occur only in cold weather. When the warm weather comes the trouble disappears and is liable to return again in cold weather.

Upon undressing at night the patients experience fre-

quently the greatest itching, probably on account of the particular form of shock which the cold excites. Now, necessarily where we have a disease characterized by itching, and the itching of pruritus is sometimes very intense, we have scratching of the parts, and as a result of the scratching we frequently have some lesions of the skin, but these lesions are in no way connected with the disease, they are entirely the result of the scratching of the parts. On account of this intense itching the patient is frequently troubled very much about sleep at night, the itching being so intense and annoying sometimes as to entirely preclude the possibility of sleep.

Etiology.—Now as regards the etiology of this peculiar form of disease. The study of the etiology is sometimes very difficult to solve. Necessarily in a disease characterized by both local and general manifestations, the causes producing the disease are numerous. Among these may be mentioned, disorder of the digestive system; constipation; disorder of the liver; intestinal worms; disease of the kidneys; disease of the uterus or ovaries; stricture of the urethra; stone in the bladder; imperfect venous return, as we see in the case of hemorrhoids; varicose veins of the legs, scrotum, etc. We have also a group of mental causes, of which I may mention excitement, business anxiety and still further, the element of habit. It is altogether probable that scratching not only has a tendency to prolong or aggravate the disease, but to actually produce it at times. The patient gets into the habit, from some excitable or emotional disposition, of scratching the parts, and as a natural consequence of the scratching there is either a true or imaginary itching, and the two work together, itching and scratching; the more they scratch the more they itch, and the more they itch the more they scratch. There is no doubt, therefore, that scratching has an etiological influence on the disease. It is quite certain also that the influence of cold has a certain etiological effect, as manifested by the itching induced when the patient undresses to retire, and as is also seen in certain forms of the disease which occur only during the cold seasons of the year. There are cases, however, where no cause whatever is apparent. Certain articles of diet seem at times to have a certain influence in regard to the production of this disease.

Intestinal worms is one of the commonest causes of pruritus ani. Stricture of the urethra, stone in the bladder and hæmorrhoids which I have mentioned as etiological factors, generally produce the form of pruritus known as pruritus ani. It is well known too that certain disorders of the liver and kidneys have a certain influence in this direction, for instance, in the case of jaundice we are almost sure to have some itching. In the case of diabetes we almost invariably have itching of the skin, particularly the form known as pruritus vulvæ in women. Quite likely the uric acid diathesis or that peculiar condition of the kidneys or system wherein we have imperfect elimination of uric acid, has much to do with the production of the disease.

In any case however the disease is the result of either direct or reflex irritation of the sensory nerve filaments supplying the skin, and it is a little singular too how the trouble seems to be confined to a certain set or division of the sensory nerves. For instance, we may apply some preparation to the skin that will entirely destroy the sensation of itching, without appreciably affecting the sense of touch or tactile sensibility of the part. We may apply a substance to the skin like cocaine and entirely destroy the sensation of pain, but still the sensation of touch remains. So there is a distincton between the various kinds of sensory filaments and it is those particular sensory nerve filaments which give the sensation of pain and itching that are involved, rather than the sensory filaments or nerve terminations which give the sense of touch.

Treatment.—Now to proceed to the treatment of the disease, and we come to the most practical part of the subject. In view of the fact that we have a great many manifestations of the disease and that a great many etiological factors are concerned in its production, it is only natural that a great many remedies have been suggested at different times for the cure of the malady. The first thing perhaps to be done in the treatment of this disease is to strictly prohibit scratching of the parts, because, as I have already intimated in speaking of the etiology, it is entirely probable that its production, aggravation or prolongation depends a good deal upon scratching. Even after the cause is removed and the disease practically cured, if the scratching is continued it is liable to return.

In almost any case it is always well in the beginning of the treatment to look to the digestive system and correct any errors in this direction by the proper regulation of the diet, by the use of pepsin, laxatives, alkalies, etc.

Where the cause of the disease is apparent, as in pruritus ani, where it depends upon hæmorrhoids or other diseases of the rectum, bladder, stricture of the urethra, or intestinal worms, etc., pruritus vulvæ, where we have perhaps a uterine discharge, enlargement of the veins of the labia, etc., in the leg, or where it may depend upon varicose veins; or in diabetes, where we have itching of the skin, etc., in all of these cases the original cause must be treated.

In the case of pruritus ani the disease is generally very readily gotten rid of by removing the cause, whether it be rectal disease, stricture of the urethra, stone in the bladder, or intestinal worms, and these are generally the cause of pruritus ani, although there may be certain other indirect causes which are difficult to ascertain. Several of these cases that have come under my observation disappeared immediately upon the cure of stricture of the urethra. In the case of varicose veins of the leg where we have pruritus the trouble is generally readily gotten rid of by the application of a bandage to the leg. In pruritus of the scrotum, if there be varicose veins in the form of varicocele, the wearing of a suspensory bandage will help to get rid of the trouble.

The cause of the disease cannot, however, always be removed and cannot in fact always be ascertained. In that case we are obliged to use palliative treatment, and generally in a more or less empirical manner, the palliative treatment being in the form of local or topical applications and internal remedies. It is very evident in diabetes that the cause cannot be removed, as the disease which causes the pruritus is usually an incurable one. In pruritus senilis the disease depends largely upon old age and that cause is pretty difficult to remove unless we "remove" the individual.

In pruritus heimalis, or the particular form described by that name which occurs in the cold seasons of the year, and which seems to be caused by the changes of the season, it is of course impossible to remove the cause. Even in those cases where surgical interference would remove the cause it is not always practicable for the individual to submit to surgical interference, and sometimes patients would refuse it if it were possible. In other cases we are obliged to resort to palliative treatment in connection with the removal of the cause, so in any case palliative treatment must receive due consideration.

Among the internal remedies used in the treatment of pruritus are strychnine, arsenic, atropia, etc. Salicylate of soda in large doses may be mentioned as one of the most useful internal remedies. Pilocarpine in doses of one-fourth to half a grain, two or three times a day, is also in some cases very useful. Jaborandi, of which the drug just referred to is the active principle, given in the form of a tincture, in half drachm doses, three times a day is beneficial in some cases.

Among the external applications, the one which stands at the head of the list as an anti-pruritic or remedy to control itching of the skin, is prepared by a firm doing business, I believe, in St. Louis, and is known as campho-phenique. It is certainly one of the most useful anti-pruritics we have on the list. It is, I believe, a mixture of equal parts of camphor and carbolic acid rubbed together, and is in the form of a liquid. This application will in almost every instance control local pruritus, but it must be applied carefully. If it is applied too freely it will act as an escharotic and produce exfoliation of the superficial parts of the skin. It should be applied in the undiluted state and not oftener than once a day, or every other day, and in some cases once in three days is often enough, as the itching does not usually return for several days after each application. Of course, it is only mentioned as a palliative measure, but it does seem in some cases to have a more or less curative effect. Among the other remedies used for their anti-pruritic effect are camphor, which probably stands next in importance, hydrocyanic acid, sulphur, chloral, conium, belladonna, hyoscyamus, etc.

These last three remedies may be used in the form of the fluid extract to be touched on the parts in the undiluted state.

The following formulæ will be found very useful as applications:

℞ Chloral camph., - - - - ʒij.
Bismuth sub. nit., - - - - ʒij.
Aquæ rosæ ad., - - - - ℥iv.

℞ Acidi hydrocyanic. dil.,
Tr. opii, aa - - - - ʒij.
Pot. carb., - - - - - ʒij.
Aquæ rosæ ad., - - - - ℥iv.—M.

In many instances an application in the form of a dusting powder is more beneficial than lotions and ointments and in fact ointments, as a rule, are not beneficial in this disease. Where there is a tendency to moisture the dusting powder is usually indicated and the particular combination known as Anderson's powder, containing camphor, oxide of zinc and plain starch in the following proportions is one of the most useful. The camphor is useful as an anti-pruritic, and must be finely pulverized, and mixed with oxide of zinc we get a more or less astringent effect.

℞ Pulv. camphor, - - - ʒjss.
Zinci oxidi., - - - - ʒiv.
Pulv. amyli., - - - - - ℥j.

M. Sig.: Apply as a dusting powder.

Chloral-camphor may be made up into a paste by mixing two drachms of it with an ounce of plain starch. When the paste is formed it should be placed into a wide-mouth bottle and be kept well corked.

Baths are also used in the treatment of pruritus as they are in many other skin diseases, but perhaps the alkaline bath is the most useful. There are some cases in which a sulphur fume bath is exceedingly useful means in the treatment of general pruritus, if it may be called a bath. The patient may be enclosed in a sort of box made for the purpose, which is air tight, the head and neck being exposed. A little sulphur placed on a metallic plate is then burned over a spirit lamp in the box. In some cases the patient is entirely cured of the pruritus by this means alone. In the absence of this box apparatus made for the purpose the same object may be accomplished by surrounding the patient, from the back down, and the chair on which he sits, with a thick blanket or quilt and burning the sulphur under the chair.

One of the most useful means in the treatment of this disease I have not as yet mentioned. I refer to the use of electricity. Electricity is not only palliative, but it seems to have a curative effect. It may be used either in the form of the galvanic or faradic current, applying it to the surface about as strong as the patient can comfortably bear, the guide as to the strength of current being the feelings of the patient. I believe that, as a rule, the faradic current is more beneficial than the galvanic, at least I have had better satisfaction with it, especially in those forms wherein the disease is general in character. In the treatment of that form of pruritus which we see during the cold months of the year, I have had better success with electricity than by any other means.

TRANSLATION.

COMPLICATIONS OF DIABETES.

MUSCULAR, GASTRO ENTERIC, DYSPNŒIC, CARDIAC, CEREBRAL OR COMATOSE FORMS.

TRANSLATED BY F. NEUHOFF, M.D.

I will speak to-day of the complications of diabetes and of the various forms which this malady may assume.

These complications, but partially known in France, are here designated under the name of diabetic coma. This latter is a dangerous name, as it gives to the physician a false feeling of security, and makes him think that there is no imminent peril so long as comatose phenomena do not present themselves. Most authors have attributed these symptoms to a formation of acetone in the blood, and have described them under the name of acetonæmia. The question is not settled. I think the word acetonæmia can be retained, without inconvenience, for the condition which we understand by it.

By it we ought to designate the collection of phenomena, occurring in the course of diabetes, and acknowledged to be caused by the retention in the economy of poisonous products, whatever they may be.

Just so, uræmia means a poisoning, not by urea, but by all the excrementitous material which the kidneys no longer eliminate.

These facts being granted, we must admit five principal forms of acetonæmia, which may remain separate, but which ordinarily co-exist, and give rise to a picture of symptoms peculiarly complex. I will designate them as follows, according to the functional disorder predominating: Muscular form, gastro-enteric form, dyspnœic form, cardiac form, cerebral or comatose form.

Muscular Form.—This form is characterized by extreme languor, painful points in the muscular masses, and a sensation of suffering occasioned by motion. These patients have a presentment of approaching death. The face is discolored, although there is no notable change in the expression of the physiognomy. There is no febrile reaction, but rather a lowering of the temperature by half a degree, coincident in general with a diminution of the quantity of urine.

These symptoms persist for a certain time, then disappear; sometimes, if they are not controlled, they suddenly increase, or become complicated with symptoms of one or the other of the forms which follow; in this case they may be regarded as a prodrome of these latter.

Gastro-enteric Form.—Preceded in certain cases by extreme languor and general weariness, this form is characterized by a sensation of malaise, and by nausea, followed by abundant vomiting.

mucus and bile. The vomiting returns at intervals during many days. An obstinate constipation occurs in some cases. But at other times, there exists a liquid diarrhœa, extremely abundant, and preceded or accompanied by violent colic and a notable diminution in the secretion of urine. This flux appears to me to be the result of natural causes, and to be destined to eliminate the organic waste products which intoxicate the patient. That is why some of our patients in whom the diarrhœa has ceased for a little while, are attacked by headache, intense dyspnœa and a coma which carries them off rapidly. The diarrhœas of this nature are, therefore, beneficial, and it is the duty of the physician to favor this effort of elimination on the part of the organism, by the administration of purgatives and diuretics. Indeed, blameworthy is that doctor who would attempt to arrest it by ill-timed medication.

Dyspnœic Form.—This is especially characterized by a painful sensation of oppression with difficulty of respiratory movements. It may come on suddenly, or it may follow some of the other symptoms which we have described. Respiration is accelerated, but regular, differing in this respect from that of uræmia. There is a shortness of breath comparable to that which a fast walk or long run produces. The face is not purple, but pale and livid; the patient is in bed in a half upright posture, or he has complete orthopnœa; he is worn out by a dry, but not paroxysmal cough; agitated and anxious, he experiences a feeling of anguish which gives the idea of approaching death; his breath has an odor which may be compared to that of alcohol, ether, or certain kinds of fruits, as the apple or melon for example.

This state can not be explained by any pulmonary or cardiac disorder, and if sometimes auscultation shows the presence of a slight murmur over the cardiac orifices, it has no significance; there is here a dyspnœa of toxic origin, either simply nervous, or perhaps connected with anoxhæmia.

Differing from Cheyne-Stokes respiration which has no intermittence, diabetic dyspnœa is, nevertheless, most painful, for the respiratory act is very frequent and extremely labored. This dyspnœa has a variable duration; it may persist many days, then disappear, unless there occur in addition phenomena of cardiac paralysis or diabetic coma.

Cardiac Form.—The cardiac disorders manifest themselves, so to speak, constantly, by rapidity and smallness of the pulse, which increases rapidly to 120, 140 or even more beats a minute. It is small, regular, and more or less feeble. The extremities are cold, the weakness is excessive, the fatigue extreme, the temperature lowered. Some patients, who apparently do well during the night, excepting slight shortness of breath, are suddenly taken with general uneasiness, with inability to maintain the upright posture, or to execute the least movement without getting pale and falling down exhausted. I have recently observed this grave form in a patient of mine. An old lady, rheumatic and diabetic,

was after some exertion and motion, affected with excessive weariness; she grew lean, nevertheless she continued her jaunts, and seemed always to enjoy good health, when one morning, in getting out of bed, she fell down unconsciously.

"I am going to die," she exclaimed. She was put to bed and made to inhale ether. She finally recovered, but said she was very ill and that her life was in danger. She complained of a pain in the front part of the chest, and between the shoulders. On auscultation, I heard a slight murmur at the base of the heart. I asked myself whether this patient was not suffering from angina pectoris, and whether the accidents observed were not dependent on a lesion of the aorta or coronaries. Next day, wishing again to arise, the patient again broke down. Struck by the peculiarity of these accidents, I now thought of diabetes. Examining the urine, I found it to be of a high specific gravity, and to contain 50 grammes of sugar to the litre. I now made the diagnosis of heart phenomena dependent on diabetic intoxication.

I prescribed a purgative enema and a draught of ether and bromide of soda. During this time the pallor and oppression increased, the anguish grew more excessive, the heart beats reached 140 per minute, and five days later death took place as the result of a slight effort, consciousness being preserved to the last.

It is no doubt difficult to explain this kind of death. Still we know it was not from syncope. For in syncope death is instantaneous, and results from spasm of the heart; on post-mortem the heart is found either empty or containing a small quantity of fluid blood. In the cardiac form of diabetes, the pulse accelerates itself at first, then the heart grows feeble and ceases to beat, as it gradually loses its power; the cavities are filled with blood clots. It remains to be determined what is the cause of this paralysis. Is it the result of an abolition of the red blood-corpuscles, of an anoxhæmia, as the discoloration of the skin would indicate, or does it result from failure of action of pneumogastrics, which no longer exercise their moderating influence on the sympathetics? If the mechanism and cause of these troubles were known, perhaps we might find useful indications for their treatment.

Cerebral form. This form, which is by far the best known, comes on suddenly, or follows one or the other of those forms which we have studied. In most cases it is announced by prodromic phenomena, such as lassitude and extreme weariness.

The symptoms which characterize it are variable. Sometimes there is a headache of medium intensity with vertigo at the moment of waking or during the day; sometimes there is a coma, more or less profound. There is a delirium which urges the patient to get out of bed and to run away.

These diverse varieties of the cerebral form are more rare than diabetic coma; they may exist alone, then disappear; but often they are accompanied by somnolence and coma.

The coma, which is the most common expression of cerebral acetonemia, has, under some circumstances a beginning no less sudden. Frequently, after a sudden effort, the patient falls, stricken by a kind of apoplectic stroke which reminds one of that produced by cerebral hæmorrhage. The collapse is complete, the muscles relaxed, the integument insensible, the eyelids closed, the pupils dilated, the extremities cold, the face pale, the mouth sometimes half open. The breath is sour and very penetrating. Its odor is midway between that of alcohol and vinegar. Deglutition is difficult or impossible; respiration short and abrupt, sometimes slowed. The temperature is normal or lowered. The dejections are involuntary, and the torpor profound. This state may last from a few hours to many days, and always terminates fatally. Nevertheless, I think appropriate medication should be able to render itself master of it, as is to-day the case in uræmic coma.

Such are the grave symptoms of diabetes. In order to draw attention to them in a more special manner, it appeared to me proper to consider them separately, in spite of the fusion which they present in certain cases.

Acetonæmia, like uræmia, reveals itself under some circumstances by transient disorders, too often disregarded. In uræmia these disorders reveal themselves by a change in character, by impatience, insomnia, and constrictive headache, especially apt to be nocturnal. Then at the end of some days this collection of symptoms disappears suddenly as the result of either a spontaneous breaking up or an abundant diuresis.

In acetonæmia, these troubles consist in sensations of excessive feebleness and torpor of all the faculties; then insomnia appears; the disposition becomes sorrowful, restless and agitated by a presentment of approaching death. The character becomes cross. A patient who had been ill with the grip complained of accidents similar to the above. As she had no lesion which might account for her symptoms, I suggested an examination of the urine. The patient now told me that she had once been diabetic, but for a long time she had been absolutely cured. Moreover, she had neither polyphagia nor polyuria, but only inappetency, disgust for food, and great lassitude. The urine contained 45 grammes of sugar per liter. I administered purgatives, and the accidents rapidly disappeared, but reappeared after a few days.

For two weeks the patient continued to complain of extreme fatigue, and to speak of her approaching end. Purgatives and diuretics, however, conquered the disease. My patient regained her gaiety and declared herself transformed. Examination of the urine no longer showed sugar.

Analysis of the urine, therefore, imposes itself in all cases of this kind. It shows us that glycosuria may disappear in spite of the persistance of the disease of which it is only a symptom. It may, moreover, reappear later on with new phenomena of intoxication. A similar thing happens also in albuminuria.

The symptoms, when of a certain intensity, with dif-

ficulty escape notice; but, coma excepted, they frequently do not sufficiently arouse the attention of the physician. Exhaustion, accompanied by acceleration of the pulse, great dyspnœa, excessive fatigue and a presentment of death are easily recognized. It is otherwise with the dyspnœa which it is possible to confound with uræmic dyspnœa (especially when albuminuria co-exists) in spite of the differential characteristics of which we have spoken.

As to the delirium and the coma, they are so similar in uræmia and acetonæmia that without the odor of the breath and the analysis of the urine it would be difficult to distinguish them. What renders error more easy, is that frequently the phenomena of acetonæmia may be explained by an important disease of some organ. Thus the exhaustion following movements which render the upright posture impossible may be attributed to an affection of the heart, to angina pectoris, etc. The presence of pre-sternal pains, and of oppression and of cardiac murmur render error more easy. A cordiac, murmur is indeed the rule in many diabetics who are at the same time subject to chronic rheumatism and arterio sclerosis.

In other cases, the stomach might be considered as the origin of the oppression, pallor and despondency, but the troubles arising from a disorder of this organ do not appear as suddenly as those of acetonæmia.

Acetoæmia, like uræmia, is almost always occasioned by a disorder of the organism. It manifests itself, sometimes as a result of a purely physiological cause, as a vivid emotion, fatigue, a chill, and, according to some authorities, a two highly animal regimen; sometimes it is occasioned by an intercurrent disease (no matter how mild), as for example, gastric disturbance, bronchitis, or pneumonia. As the danger in diabetics is from acetonæmic complications, we recommend a careful hygiene.

The symptoms which we have above discussed were formerly regarded as due to poisoning of the organism by acetone, whence the name of acetonæmia under which we have grouped them. But we now know that this last term is not exact, like that of uræmia, and that acetone is not the cause of the diabetic intoxication.

While some authors admit the identity of intoxication by acetone and diabetic intoxication, others declare that acetone is not the cause of this intoxication. Others, again, have accused as producing the intoxication not acetone, but the bodies capable of producing it, such as ethyl-acetic acid, aceto acetic,oxybutyric or these ethers and aldehyds.

Of late, diabetic coma has been attributed to the presence of those acids which diminish considerably the alcalinity of the blood. Hence the bold attempt of Lepine, who has transfused alkaline solutions into the veins of patients. This diversity of opinion proves that the question is not settled. It is possible that there may exist besides acetone and its derivatives, some other principles more toxic, but which on account of their small quantity or peculiar nature have escaped analysis.

As we are ignorant of the pathogenetic conditions of acetonæmia, no precise therapeutic indications can be drawn from them. Nevertheless, it is certain that the accidents which we have described under this heading are the result of auto-intoxication, which, as a rule, is accompanied, by diminution of the quantity of urine. Hence the indication of favoring, like in uræmia, the elimination of poisonous substances both by the gastro-enteric and the renal channels.

Besides, the employment of purgatives and diuretics has been of great service to me in the treatment of several grave cases of acetonæmia.

To these general indications, others may be sometimes added. Thus, when there is general pallor, and oppression seemingly due to faulty absorption on the part of the red blood-corpuscles, inhalations of oxygen find a natural indication. When the pulse is very rapid, and the least movement induces faintness, and there are signs of cardiac paralysis, then the employment of caffeine and ether, as also the use of lotions and cutaneous frictions impose themselves. In such cases, the physician ought appreciate the gravity of the situation, and should act with promptness and energy. The grave phenomena which are observed should be immediately combated.

The complicated forms of diabetes which so speedly prove fatal have, besides a clinical interest, also a medico-legal importance. The symptoms when of the gastro-enteric or comatose variety may cause a suspicion of poisoning and may mislead justice.

In doubtful cases, where diabetic intoxication is suspected, the heart and its contents should be carefully examined, and it should also be recollected that in certain cases of diabetes, certain organs, particularly the pancreas, may be found diseased.—Dr. Lancereaux in *le Bull. Med.*

Urobilinuria.—According to Hayem this condition, when habitual, persistent, and varying in degree, has a clear pathological significance, and is a valuable indication in forming an early diagnosis in diseases of the liver. He regards urobilin as the characteristic coloring matter of hepatic incompetency. He has observed urobilinuria in the following cases:

1. At the beginning of alcoholic cirrhosis.
2. In cardiac patients in whom the liver is not enlarged, it may be an indication of incipient hepatic lesions.
3. In numerous acute affections when observed in alcoholic patients, such as typhoid fever,. When a large proportion of urobilin is detected in this affection, reserve should be made with regard to the prognosis.
4. In newly delivered and nursing women.
5. In most forms of cachexia. Urobilin has a feeble coloring power, and is found in pale urine. The deep coloring of urine observed in certain affections (fever with perspiration, lassitude, overfatigue) is usually due to urochrome.—*Med. Record.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, AUGUST 30, 1890.

NEW YORK AND ITS CLINICS.

We had an opportunity recently, under the kindly escort of Dr. H. W. Loeb, who has been engaged in clinical work in New York during the summer, of visiting some of the hospitals and clinics of the great metropolis. It was while the International Congress was in session, so that very few of the most prominent operators were to be seen. But this did not prevent our getting an insight into the workings of the institutions, clinics, etc. The latter presented many features of especial interest. The buildings of the two largest, the Vanderbilt and the Roosevelt, being comparatively new, the appointments and facilities for clinical teaching and for handling the large number of patients in attendance daily are of course of the latest and most approved order. But what was most striking, outrageous as it is, was the great number of well and fashionably dressed, evidently well-to-do people, both male and female, who applied for free treatment. It appears that the anxiety for abundance of material is so pressing that there is hardly any discrimination in this respect. At the Vanderbilt clinic on Tuesday, Aug. 12, there were 568 patients, and judging from their appearance, we venture to say that three fourths, at least, of them were abundantly able to pay for private medical service. We have, of course, heard the numerous complaints that have been awakened amongst the New York physicians on this account, but we were not prepared to witness the spectacle presented there, of gaily attired, semi-aristocratic humanity going in droves, petitioning for free prescriptions, free medicines. A notice of the presentation of a beautiful prize-etching to the patient who had made the most visits in a month would have surprised us none at all.

What are we coming to? The profession of New York, as a whole, would be justified in arising in emphatic and effectual protest against such wholesale diversion of their revenue.

Physicians are swindled and beaten out of an undue proportion of the fruits of their labor already, by the public in general, so that it would appear but seemly for the profession to avoid and suppress as far as possible this rapidly increasing source of pecuniary loss through a channel of its own making.

We are aware that New York is not the only city bearing the burden of undiscriminating clinicians; that our own is not free from blame in that regard; but we are under the impression that the fault is more glaring there than here.

"THE PECULIAR PEOPLE."

Among the English this expression will be found in common use, which appears to be applied to "Faith-Curists," "Salvationists," and other sects of that ilk, as a mild token of the general contempt or want of esteem in which they are held. It is an appropriate way of designating such bands of fakirs, although their methods would justify one in using infinitely stronger expressions without doing violence to truth.

There is at present sojourning in this city a band of "converters," led on by Mrs. Maria B. Woodworth, a self-styled "evangelist," whose methods would well entitle them to be called "peculiar people," if nothing worse. We hesitate whether to class them among the "fools" or the "knaves," and candidly confess that we regret that our choice of terms is so limited. Lest we may be deemed harsh, we will at once proceed to explain. These people are using hypnotism in their performances, and yet assert that the scenes to be witnessed nightly in their tent are nothing more nor less than visible manifestations of the Divine power, brought about through their own humble intervention. We can place them in one of the two above-named categories only after deciding for ourselves whether they do or do not really believe what they say. A brief description of their methods might prove interesting. The speaker, generally Mrs. Woodworth, delivers a long address, during which she continually makes use of suggestion, and in a most effective manner. Quotations are given from the Bible relating instances where people have been thrown into trances by the Divine will, and statements are made that similar manifestations have been given on previous nights and will probably be vouchsafed on that particular evening. After these points have been dilated upon and repeatedly dinned into the ears of the listeners, a general invitation is extended to come nearer to the platform so as to be more accessible to the influence, an invitation that is immediately accepted by the more susceptible hearers, mostly young women, and all probably intellectually handicapped to some degree. A glaring electric light suspended before the audience may be presumed to be a prominent factor in the pro-

ceedings. After assembling about the platform, prayers and songs are next in order, and during this time the workers or operators pick out and endeavor to influence the more promising subjects before them, usually with great success; the subjects succumb almost by the dozen.

Some may say, "Granted that this be hypnotism, does not the end justify the means?" In reply we can only say that it remains to be proven that one or repeated hypnotizations can permanently reverse the moral tendencies of an individual. Certain it is that such exhibitions are reprehensible, and highly demoralizing in their general effects, even though conducted in the name of religion. While this is undoubtedly the case, it is extremely improbable that anything can or will be done to check the performances unless some very positively harmful results are shown, as, for example, in the case of the Faith Healers recently punished in New York. In the meantime the medical profession can stand back and marvel at the wonderful cures which Mrs. Woodworth and her followers are performing, cures of organic diseases which physicians have treated in vain. One in particular, published in a daily paper, is that of "a young man who was suffering from an abscess in his side which had cost him hundreds of dollars. He was living on tonics and stimulants, but just living and no more. Preparations were being made for a surgical operation which contemplated the removal of two of his ribs which were rapidly disappearing before the inroads of the disease. He went to two meetings and before he had been in the presence an hour he came under the influence and now he is cured, ready to testify to the wonderful and inexplicable powers of the faith."

After this nothing more need be said.

The Striæ of Pregnancy.

In the Cincinnati *Lancet-Clinic* of recent date there is a contribution by F. W. Langdon, M.D., of Cincinnati, on the "Silver Lines of Pregnancy." This is a subject to which not much attention has been paid, either by the profession or the laity. Women regard these striæ as part of the inevitable consequences of becoming a mother, and although they are exceedingly disfiguring, and distasteful on that account, still no thought is paid to them on account of the belief that they are unavoidable. For the same reason medical men have not hitherto given them much consideration, but if what Dr. Langdon claims is true, the subject is one of much importance. He believes that they are entirely avoidable, and furthermore, that by their presence they bring about a weakening of the abdominal wall, which carries with it all the dangers from such sequelæ as constipation, pendulous belly, greater liability to hernia, impairment of activity and gracefulness of motion, necessity of wearing various uterine and abdominal supports, etc.

Dr. Langdon believes, with Langer, that these striæ are not cicatrices, but alterations due to a re-arrangement of tissue by stretching, which re-arrangement has become permanent because the elasticity has been destroyed. These alterations consist of atrophic bands which involve all the layers of the skin.

The author regards these striæ as the product of modern dress and habits. They are not due solely to the distension of the skin by an abdominal swelling (this opinion is confirmed by their absence in men suffering with tumors, and in most uncivilized women), but rather to the fact that there is preceding this distension a lowered circulatory and functional activity of the abdominal wall, due to its compression between a fœtal or other tumor and a rigid corset; or, in some cases, by constricted waist bands from which weighty garments are suspended; there is in both cases an interference with the blood and lymph circulation of the abdominal parietes, and consequent atrophy and impaired functional power in both skin and muscles.

It is the duty of the regularly engaged physician to mention the matter in time, and explain the means necessary to prevent these blemishes. The earlier in pregnancy the treatment is begun the better, but is is often effective when begun as late as the fifth month. It may be conducted by the patient herself, except perhaps during the last month, when the assistance of a nurse may be required. It consists simply in aiming to keep up or restore the nutrition and elasticity of the skin over the abdomen, upper thigh, and gluteal, in the belief that a perfectly normal skin will admit of any degree of stretching required by pregnancy without losing its elasticity. The means are: 1, Daily free inunctions of olive oil to abdomen, lumbar, upper thigh, and gluteal regions; 2, gentle friction with the bare hand for ten minutes following the oil. A large quantity of oil will disappear during the operation, but any superfluous quantity may be removed with the towel. Finally, corsets, constrictions and suspension of clothing from waist-bands are to be avoided entirely, at least after the third month of pregnancy. Among the results attained by this treatment is relief from the aches and shooting pains so often complained of, which are largely due to the irregular stretching and compression of the nerves of the abdominal wall.

St. Louis and Medical Colleges.

There are now three medical colleges in process of construction in St. Louis; cuts of two may be found in our advertising pages, and a third, the Beaumont, we present here, that our readers may have an opportunity of observing the architectural features of each. This marked impetus in medical college building presages the assumption by our city of a prominent place as a center of medical education, especially when all of the

colleges fall into line and join the three-term movement which must inevitably come about before very long.

MEDICAL ITEMS.

THE next International Medical Congress will be held at Rome in 1893.

HOT CLARET is said to be an excellent gargle in acute sore throat, being an agreeable astringent and non-poisonous.—*Coll. and Clin. Rec.*

CONSUMPTION OF OPIUM.—The total annual home consumption of opium in China has lately been reckoned to be about 41,800,000 pounds.

TO GUARD AGAINST CHOLERA.—The French Senate, on August 4, voted 100,000 francs for the establishment of frontier posts to prevent the entry of cholera into France.

SMALL-POX AT WACO, TEXAS.—Cases of doubtful diagnosis that have occurred in Waco have been pronounced smallpox by the State Health officers, and strict quarantine regulations have been put in force.

DR. KOCH AND THE BACILLUS.—Dr. Koch read before the Medical Congress in Berlin a paper in which he is said to have declared that he had discovered a way of killing the tubercle bacillus, and of curing tuberculous disease.

ALCOHOL IN DIABETES MELLITUS.—Dr. Arnold Pollatschek, of Carlsbad, believes that alcohol should be allowed in diabetes with the greatest caution, its effects being carefully observed; pure, light and well fermented table wines should be chosen; white wines are to be preferred. If beer is allowed it should be given now and then in moderate quantities; it should also be mild and well fermented.

MEDICAL PRACTICE UNDER DIFFICULTIES.—The favorite wife of the Shah has been operated upon by Vienna oculists for glaucoma. It is said the consulting Persian physicians who recommended the operation are confined to await the result.

A FEMALE DENTAL SURGEON.—Miss Anne F. Reynolds, D.D.S., holds the first dental degree that has been granted in Massachusetts. She graduated June 19, from the Boston Dental College. She also received the first prize for senior honors.

A CREMATION COMMITTEE.—The International Cremation Congress at Berlin has appointed a committee, consisting of members from the different countries represented at the Congress, for the purpose of furthering the movement for the cremation of the dead.

FOUL AIR IN STREET CARS.—A suggestive thought for daily habitues of street cars is the fact that Dr. Nichols, of Boston, found more than twice the amount of deadly carbonic acid gas in the air of passenger cars than in the Berkeley street sewer.—*N. E. Med. Monthly.*

HYDRONAPHTHOL is recommended by Dr. Clark in typhoid fever, green diarrhœa of infants, dysentery, and ordinary diarrhœa. He gives two or three grains every two hours. In flatulent dyspepsia aud dilatation of the stomach it is of little use. Nausea is caused in some cases.

A WESTERN POST-OFFICE.—*Popular Science News* is responsible for the statement that a new Western post-office has been named Malaria, probably because the mail service of the place is intermittent. We may add that when it grows to be large enough to have a money-order office, it may assume also a remittent character.—*Coll. and Clin. Rec.*

A SYMPTOM OF PERFORATIVE PERITONITIS.—Lewaschieff noted the following symptom in a case of typhoid fever with perforation, which was confirmed by an autopsy: On forced inspiration or even during ordinary respiration a noise as of air or gas bubbles passing through a layer of fluid to the surface, to be heard over the most painful point. This sound could be heard only over small, circumscribed areas.

SALT BRINE AS AN EMBALMING FLUID.—The remains of a number of Hungarians were found in a brine pit, where they had been thrown forty-one years previously. The bodies were so well preserved that they could have been utilized for anatomical study. The salt had pen-

etrated the tissues and was found deposited in the interior of the body. This shows how readily substances in solution pass through the skin, and explains the beneficial effects of mineral baths on the internal organs.

"The Lesson in Anatomy."—Referring to Rembrandt's celebrated picture, "The Lesson in Anatomy." the *Lancet* describes a curious anatomical error which is certainly not generally known. The pronator radii teres is drawn as if it ran from above downward and inward from the radius to the ulna, instead of downward and outward from the ulna to the radius.

On Pediculi.—We notice in an esteemed contemporary what appears at first sight to indicate an extension of the domain of Public Medicine, but which is probably, after all, to be ascribed to a vagary of the typesetter. We read in a description of some of the remarkable animal preparations found in a homœpathic pharmacy: "Pediclus. Three kinds are for sale, namely, head lice, body lice and public lice.—*Bost. Med. and Surg. Jour.*

Egyptian Mummified Cats.—The disturbers of the night dreams of the ancient Egyptians when they came to their untimely end were mummified. But the modern Egyptian has no respect for the dear departed, and we learn that these ancient mummies of cats are sold by the ton for about $28, and these pets of the Pharaohs are spoken of now as fertilizers, having the value of 42% of tri-basic phosphate of lime and 5½% of nitrogen.—*Phar. Rec.*

Eastern Slanders.—Marion County, Illinois, has gained the credit of having the stingiest man on earth. He tried to buy part of a bottle of patent medicine for his son, who, he claimed, would die before he could consume the entire bottle.

A Kansas editor has recently been granted a pension of $72 a month for indigestion. He will soon recover from his indigestion now that he has the means of buying something to digest.—*Times and Reg.*

A Remarkable Accident.—A man employed in the chlorate of potash department of Messrs. Muspratt's works, at Flint, Wales, was entering the premises when he struck a light against his trousers. The wearing apparel was so impregnated with chlorate dust that it ignited instantaneously, and he was immediately enveloped in a mass of flame. A fellow-workman promptly threw him into a pool of water, but when extricated it was found that he had been so fearfully burned that no hopes are entertained of saving his life.

Hot Water in Hour-Glass Contraction.—Dr. Galloway, of Xenia, Ohio, reported in the *Cin. Lancet-Clinic* a case of hour-glass contraction which followed a case of instrumental delivery. A stream of water, hot as the patient could bear, was thrown against the constricted uterus for a period of fifteen minutes, causing speedy and easy delivery of the placenta, with entire absence of hæmorrhage. The idea is advanced that in conjunction with the above, a valuable aid might be found in these troublesome cases in flushing the bowels with two or three quarts of hot water.

The Fields of Vision in Hypnotism.—In a paper which appeared in the *Neurologisches Centralblatt*, Moravosik records the curious case of a hysterical woman, æt. 23 years, whose fields of vision could, during the waking condition, be considerably enlarged by various peripheral stimuli, such as the application of warmth to the skin, or a tuning fork to the ear; and, during the hypnotic state; a sad suggestion narrowed the field, and a cheerful suggestion considerably enlarged it.—*Med. Record.*

Tuberculosis Among the Jews.—Two English authors, Behrend and Drysdale, have noted the comparative immunity of orthodox Jews with regard to tuberculous troubles. Von Chlapowski, in *Nowing Lekarske*, attributes this fact to the manner of killing practiced by the Jews, but more especially to the rigid inspection of the meat enjoined by their religion, which prevents the consumption of tuberculous meat, in his opinion the most prolific source for the dissemination of tuberculosis.

Transplanting the Thyroid Gland in Myxœdema.—According to *Wien. Med. Bl.*, the suggestion made by Victor Horsley, to transplant the thyroid gland from some of the lower animals in cases of myxœdema, has been given a trial at the hands of Lannelongue, of Paris. A portion of the thyroid gland of a wether was implanted subcutaneously on the right side of the chest of an idiotic girl, æt. 14, a cretin. The wound healed kindly, the gland uniting firmly with the surrounding tissue. The effect of this operative procedure upon the course of the disease remains to be seen.

The Type of Ideal Beauty.—

℞ Take the hair of a Hindu,
The nose of a Greek,
The mouth of the English,
The complexion of a German,
The height of a Norwegian,
The feet of a Chinese woman,
The teeth of an African,
The arm of a Belgian,
The leg of an Italian girl,
The eye of a Spaniard,
The grace of a Frenchwoman,
And you will have an American beauty.

—*Max O'Rell.*

Treatment for Agalactia.—Dr. Messinger has used the following treatment successfully in cases of

agalactia: Daily massage of the mammary glands, aloes in divided doses, cold sponging, and friction of the mammæ morning and evening. After the third application of the massage, he noticed a blueish net-work of vessels on the anterior surface of the thorax. After the sixth, milk could be pressed out from the nipples, and after the sixteenth the flow of milk was usually fully established. The massage was applied by carefully stroking the gland, from the nipple centrifugally in all directions, with a fine foam of soap, in order to evacuate the veins, the masseur standing at the head of the patient.—*Med. Record.*

A New Method of Advertising.—According to the *Boston Med. and Surg. Jour.*, for some time past complaints have been made to the Health Commissioners of Brooklyn, New York, of the persistence with which mothers of very young infants are besieged by agents of the manufacturers of infant foods. Most of the complainants were physicians who said that they had been requested by their patients to take measures to prevent the annoyance. Investigation resulted in the discovery that one of the clerks of the Bereau of Vital Statistics had been communicating the name and address to the manufacturers of the infant-foods, of every recently confined woman. The clerk was, of course, well paid for the information.

Dysmenorrhœa and Sterility Treated by Rapid Dilatation of the Cervical Canal.—The following are the figures given by Dr. Townsend in the *Albany Medical Annals* as the result of his experience in the practice of rapid dilatation under complete anæsthesia with rigid antiseptic precautions:

Dilatations in virgins for dysmenorrhæa, other means failing, 57; complete cure of dysmenorrhœa, 53; no better, 3; made worse, 1.

Dilatation in married women for dysmenorrhœa and sterility, other means failing, 33; complete cure of dysmenorrhœa, 27; complete cure of sterility, 27; remaining sterile two years or more after operation, 6.—*Boston Med. and Surg. Jour.*

Diuretic Effects of Grapes.—According to the Paris correspondent of the *Lancet*, Dr. Pecholier, of Montpellier, has published a note on the diuretic effects of grapes, which would appear to confirm the diuretic action of glucose recently brought to notice. In two cases—one a patient with a cardiac disease and the other the subject of hepatic cirrhosis with ascites—a "grape cure" was undertaken with the best results. In the former patient, notably, five pounds of grapes were daily ingested, in three parts, and the diuresis produced was much more considerable than with milk, digitalis, or potassium iodide. This effect can only be attributed to the sugar of the juice of the grape, the other parts of the fruit having been rejected.—*South. Clinic.*

The Pioscope.—The new instrument called the pioscope consists of a glass dial about 2 inches in diameter, with a white center circle, and 6 different colors radiating from the circumference of this circle to the circumference of the dial. These colors are marked "less fat," "very fat," "cream," "very good" and "poor." A drop of milk is placed under the white center, and by some chemical process its color is changed corresponding with one of the five shades, thereby indicating its quality. In some recent experiments with the pioscope, milk, which the lactometer registered 80%, was of the shade pure, but with 10% of water added it registered very poor, that is, less solids or cream. The highest test went up to 110, and the lowest to 65, according to the lactometer. Dr. Le Tourneux is of the opinion that the best test was by means of the microscope, although the pioscope experiments proved quite satisfactory.—*Med. Record.*

Lunatics in China.—In China acts of homicide or murder committed by lunatics are rare. In that country the iron hand of justice works inexorably, and the plea of insanity is not admitted as a mitigation of punishment. A laborer was recently sentenced to death in the usual manner appointed for the crime of parricide, while the relatives, who had neglected to inform the district authorities that the man was insane, were each sentenced to receive a hundred blows with a stick. According to Western ideas this punishment of lunatics is cruel, but there can be little doubt that the severity adds largely to the protection of the public, as is evidenced by the rarity of crime by lunatics in China. There are few lunatics so mad as to be altogether deficient of self-control, and the knowledge possessed by all Chinese that, whether mad or sane, they will be punished for any crimes they may commit, acts upon all as a deterrent. In England they have gone to the other extreme. The slightest evidence showing that a man or woman's mind is unhinged upon certain points is considered sufficient to shield them from the consequences of any crime they may commit, even when that crime is perpetrated with an amount of cunning and forethought sufficient to show, beyond doubt, that the person committing it was perfectly aware of wrong-doing, and was sane enough to adopt every precaution against discovery.

BOOK REVIEWS.

Pathology and Therapeutics of the Diseases of Women. By Dr. August Martin, Instructor in Gynæcology in the University of Berlin. Second American Editioı, Boston, Mass.: Published by E. W. Cushing, M.D., 1890.

This is an admirable translation of a work by one of the most distinguished operators and teachers of modern times. It is taken from lectures delivered by the author, and is clear and practical throughout. The pathological theories which he advances will be found to differ

somewhat from those current in this country, but not to any decided extent, such as might have been apparent a few years back; the views which he maintains seem to be gradually gaining ground. The surgical treatment recommended will, we think, harmonize with the methods most practiced and most successful in this country, and, wherever there is any difference of opinion, the results as shown in the author's practice and that of others will bear testimony to the excellence of his advice. We believe, therefore, that the work will be found to be a safe and reliable guide in every respect. The clearness of the descriptions can hardly be excelled; the illustrations are numerous and well executed.

Dr. Ernest W. Cushing, the translator, has subjoined an interesting appendix which treats of topics kindred to the subject matter and aids in elucidating the plates which have been added in this edition. As regards workmanship, binding, and its general mechanical execution, the book is above reproach. The work has already been translated into French, Italian, Russian and Spanish, and it is safe to say that it will meet with the same wide appreciation from the English-speaking profession. The price is $6.00, in cloth; half morocco, $7.00. The Dreyer-Brookes Publishing Co., 904 Olive st., St. Louis, are the Western agents.

BOOKS AND PAMPHLETS RECEIVED.

Recollections of General Grant, with an Account of the Presentation of the Portraits of Generals Grant, Sherman, and Sheridan, at the U. S. Military Academy, West Point. By Geo. W. Childs. Philadelphia: Collins Printing House. 1890.

No. 14 of Saunder's Question Compends.

Part I. Essentials of Refraction and the Diseases of the Eye. By Edward Jackson, A.M., M.D., Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine, etc.

Part II. Essentials of Diseases of the Nose and Throat. By E. Baldwin Gleason, S.B., M.D., Surgeon in Charge of the Nose, Throat and Ear Department of the Northern Dispensary of Philadelphia, etc.

With 118 Illustrations. Philadelphia: W. B Saunders, 913 Walnut St.

Annual Announcement, Beaumont Hospital Medical College, of St. Louis. 1890 91.

"Is the Use of Hypnotism Dangerous?" By Benno von Steinmetz, M.D., St. Louis, Mo. Reprinted from the "St. Louis Medical and Surgical Journal," August, 1890.

Extrauterine Pregnancy.

The History of—By Dr. G. W. Miltenberger.

Laparotomy for—With report of a successful case, by Dr. T. A. Ashby.

Review and Discussion—By Dr. H. A. Kelly.

General Discussion.

Papers Read Before the Obstetrical and Gynæcological Society of Baltimore City, January 14 and February 11, 1890. Published by order of the Society,

Thirty-first Annual Announcement and Catalogue of the Hahnemann Medical College and Hospital, of Chicago. 1890 91.

Reformation in the Practice of Medicine by the Dosimetric Method of Practice, with Biographical Sketch of Dr. Ad. Burggraeve. By J. E. MacNeill, M.D., Denver, Colo. Revised and Reprinted from the "Dosimetric Medical Review," July, 1890.

Dosimetry in Colorado. By the same author. W. J. Morrison, Printer, 43 Broad St., New York. 1890.

Remarks on the Albuminate of Iron. By John A. Ouchterlony, A.M., M.D., Professor of the Principles and Practice of Medicine and Clinical Medicine, Medical Department University of Louisville. Reprint from the "American Practitioner and News." 1889.

Missouri Agricultural College Experiment Station, Bulletin No. 12. Black-Leg. By Paul Paquin, Missouri State Veterinarian. Columbia, Mo., June, 1890.

Five cases of Vaginal Hysterectomy for Malignant Disease of the Uterus—All Recovered. By W. F. McNutt, M.D., L.R.C.P., Ed., etc., Professor of Principles and Practice of Medicine, University of California.

CORRESPONDENCE.

LETTERS TO A YOUNG PHYSICIAN.

Dear Doctor.—Your recent communication has been duly received and perused with no little pleasure, as it conveys to me the agreeable intelligence that you have already begun the practice of the healing art under such favorable auspices. Few graduates in medicine on leaving college are so fortunate as to enter upon active practice outside of the hospital wards immediately, and as you are blest with an active, thorough-going mentor in Dr. B., it seems to me that this is an opportune time for congratulations. Your location and the season of the year combine to afford you unusual opportunities for becoming familiar withe the wants of the sick and the afflicted from various sections of the country, and I have no doubt that you will improve the shining hours, as well as the hours that do not shine. I cannot, however, resist the temptation to give you some advice which you may appreciate more fully in after years than you will at present; it is that you should not fail to secure needed rest from your arduous duties, and that you will be careful in the selection of your diet.

You will pardon the observation from me, that too many overworked physicians forget that they are mortal, and think as long as they are at work in their profession they are doing their duty, and Providence will do the rest. The fact is, they must have a reasonable amount of rest and recreation themselves, or they will

soon be compelled to go to bed to recuperate, which you know is far less agreeable than climbing some picturesque mountain cranny, or sojourning at a fashionable seaside resort.

DIET AND DISEASE.

And that reminds me to say that you will find it of great interest to you, which might be of value to the entire medical profession, if you will make some observations in regard to the diet and the diseases of patients with whom you come in contact from all parts of the country. While I am very favorably disposed to regard with favor the tenets put forward by Salisbury and his followers, I am not yet fully converted to the theory that persons threatened with any of the more formidable diseases should be confined to a diet of meat and hot water, although I am firmly convinced that the people of this country eat far too much starchy food and sweets, and depend too little upon meat as a staple article of diet.

Too many people living at their own homes do not really know the advantages of having good beef and other meats, because in most instances the meat purchased is inferior, and those who order the best, too often find when it comes on the table that it has been ruined in cooking. Think for a moment of a man and wife, the heads of a large family, who do not know what it is to taste a properly cooked beefsteak outside of a restaurant, and who have spent fifty years of their lives eating "chips and whet-stones." That this proposition is true, will be evident to the most superficial investigator. It will be apparent also from the observation that this class of persons suffer principally from intestinal indigestion, and unless the dietetic faults are corrected, treatment will be but palliative. It is for this reason that so large a portion of our population are "floaters;" that is, they vibrate from one physician to another, and from one system of practice to the opposite, until they finally become disgusted with the results, whereas, had they been placed under strict dietary regulations at the start, the improvement following would have been quite sufficient to warrant them in continuing the first physician employed.

This habit, which I have intimated is too common, is so well illustrated in the case of a patient who lately came under my observation, that you will be interested in knowing something about her condition, together with the dietetic treatment adopted. This lady has reached the climacteric period, and is the proud mother of a family of six children, although she suffered from insomnia and indigestion. She was subject to "spells," which several of her physicians had intimated might be the first symptoms of approaching paralysis, but on close inquiry, it was brought out that these attacks were usually noticeable about three hours after taking food, or they occurred during the night, hence I assumed that they were due to the fermentation of food in the small intestine, which as you know is liable to produce cardiac complications of a functional character. By careful attention to the diet, it was shown beyond the question of doubt that these attacks were in fact due to the ingestion of starchy food and sweets, accompanied by defective gastric digestion.

Ordinarily, in these cases we are inclined to prescribe the digestive ferments, but my patient, who was quite an intelligent person, rebelled, for the reason that she had been under several physicians who had exhausted their skill in that direction. Pepsin and pancreatin, she said, were only of temporary value, and as soon as their use was discontinued, her troubles were quite as bad as ever. The patient was very much discouraged, but was willing to do anything which promised relief, although during the preceding five years she had had the benefit of the best medical skill afforded, and it was not without some hesitancy that I undertook the treatment. An encouraging feature of this case was the condition of the general system; although she had lost considerable flesh, the appetite remained good—at times even voracious. I reasoned, therefore, that if suitable diet could be adopted, the indigestion would disappear and nutrition would be correspondingly improved, and with these factors removed, insomnia would be a thing of the past.

It should be remarked in this connection that this patient had adopted a remedy of her own, both for the "spells," and for the attacks of indigestion—whisky, which I am convinced is too freely used in this country as an "appetizer." All alcoholic drinks were absolutely prohibited, but my opinion is that the directions were not in this particular strictly carried out, although the general directions in regard to diet were complied with as a rule. The reasons for the adoption of this dietary I need not take time to explain, as you will understand the underlying principles.

The following *general directions* have been prepared for Mrs.——, and will be modified from time to time in accordance with the disappearance of sleeplessness.

Starch, sugar, and foods containing them, are to be avoided for the present. This will include potatoes—both kinds—oatmeal, "grits," buckwheat cakes, or anything fried. Cheese is also excluded from the diet, and no sweets, as candies, cakes, puddings or pies, are to be eaten. Peas, rice and corn may be eaten sparingly, but only stale bread, or that which has been well toasted, should be taken at any time. Milk and cream may be drunk only about midway between meals, and no food or drink of which milk forms any considerable portion should be taken with meals. Both milk and cream can be taken about bedtime, and to either it may be advisable to add a small portion of bicarbonate of soda and a little salt.

No stimulants should be used, but some alkaline water, such as Lithia, Apollinaris or Capon, should be taken freely, between meals; a quart or more daily is not too much; but if these are not acceptable Vichy may be substituted. Acid fruits, like oranges or lemons, and similar products must not be taken until at least two hours after eating, and they should never be allowed before breakfast.

Special directions will include the free use of very hot water before breakfast, one or two teacupfuls, in order to prepare the stomach for the reception of food. *The first food* taken at all meals should be of a solid character, and all liquids ought to be excluded until the meal is partly finished, when a cup of clear coffee or tea, without milk or sugar, may be taken. In addition to meats, eggs, fish, poultry or game, toasted bread or stale bread, with plenty of butter, is permitted for breakfast, along with such of the succulent vegetables as are not prohibited.

Lunch should include some form of plain soup, with meat and some form of "greens." The following vegetables are permitted in moderation: Spinach, string-beans, celery, asparagus, beats, turnips, cauliflower, salad, cucumbers, and to this may be added cabbage, and onions when raw, but no tomatoes nor rhubarb. Condiments and pickles may be taken in moderate quantity, but no "gravy" under any circumstances.

For dinner all fat meats should be eaten freely along with the stale bread and vegetables indicated, and to this may be added a little tea, not too strong, after the meal has well advanced. Ice cream or nuts will form a suitable dessert, and with the exception of milk at bed hours or between meals, no other foods should be taken outside of the regular hours.

The regular hour for retiring should be fixed at 11 o'clock, and 7 o'clock for rising. When the weather permits, a brisk walk should be taken before breakfast, or in lieu of that,five or ten minutes exercise may be taken indoors with dumb-bells after drinking the hot water.

The results of the treatment were eminently satisfactory; the sleeplessness gradually disappeared, strength was regained, and in the course of three weeks' time the patient had gained twelve pounds in weight. An item to be noted here is, that the first few days after the treatment was inaugurated, there was an apparent loss of flesh, which caused some depression on the part of the patient. This is a matter which should be explained to those who are subjected to a strict dietary and withdrawal of starchy foods and sweets, because most persons, especially those who are stout, are very much opposed to any plan which reduces their avoirdupois.

I would like very much to give you some points in regard to the medical treatment of these cases, but will defer that for the present, believing that the foregoing will furnish you sufficient food for thought. Trusting that you will take kindly to my suggestions, and that you may be able to accomplish something in the way of alleviating the disorders of digestion, I remain,

Very truly yours,

JOHN AULDE, M.D.

1910 Arch St., Philadelphia.

BINOXIDE OF MANGANESE.

ST. LOUIS, Aug. 21, 1890.

EDITOR REVIEW:—Referring to the article on "Binoxide of Manganese" in last issue and in answer to Dr. Moore's query, would say, that I have used both the 2gr. binoxide manganese and the 1gr. permanganate potassium pills for several years in amenorrhœa, and especially in those doubtful cases where we must be uncertain whether or not pregnancy exists. I have found that they have never brought on labor or had any bad effect in those cases which later showed pregnancy, but have been of use in simple cases of amenorrhœa. I believe that in all doubtful cases they can be safely given, for if the patient is pregnant they will do no harm and will not bring on labor, and if amenorrhœa is due to other causes they will, in a majority of cases, prove beneficial.

I prefer the binoxide of manganese pills to the permanganate of potassium and I direct the patients to take them one hour before meals with water and a little water 15 minutes later, otherwise they may cause a burning pain in the stomach. I believe that in Dr. Moore's case the flow and following absorption were not brought about by the binoxide, but were due to other causes. EUGENE F. HAUCK, M.D.

SELECTIONS.

GLEANINGS FROM THE DIARY OF A PHYSICIAN IN CENTRAL AFRICA.

Reliable information is useful at the present as to the medical, anthropological and social condition of the natives of Equatorial Africa. Travellers' stories are usually received *cum grano*, and the public mind becomes confused between the soul-curdling fictions of Louis Stevenson and Rider Haggard and the graphic descriptions of a Du Chaillu and Stanley, when all attempt to realize to us the same unknown regions and strange people inhabiting them. The records, therefore, of an explorer who has not sufficient imagination and humor to see the strange and comic side of what he quietly describes, and who is a close scientific observer, are especially valuable, and it is in the dry-as-dust diaries of Emin Pasha that much accurate information can be gleaned regarding the people of Central Africa whom he governed for so many years. The various races which inhabit the vast continent which lies between Lake Tanganyika in the south, Khartoum and the deserts in the north, the vast forests of the west, and the sea, differ much from one another in their customs and language, though inter-breeding, owing to the dispersion of the women, who are carried off as the spoils of war, has greatly prevented pure types being preserved.

Chief among the tribes, most powerful among the kings, are those of the fertile lands of Uganda and Unyoro, which lie between the Lakes Victoria and Albert. Here the Arabs from Zanzibar have introduced the customs and articles of commerce. The cowrie shell is the substitute for coin, and as the natives are

not naked savages, but go about elegantly draped in dressed hides and dyed bark cloth, imported woven clothes and finery are eagerly sought after. The slave and ivory trade has, under Arab influence, developed greatly, while the rich resources of the country—the iron, coffee and fruits—are still neglected.

The Wanyoro or inhabitants of Unyoro are a cleanly and almost fastidious people; they wash frequently and anoint the body, which is clean shaven, with the exception of the head, with a sweet-smelling grey clay, and a kind of touchwood smelling of musk. They all extract the four lower incisors. Their food consists of various vegetables made into a porridge, except when meat, which is greatly appreciated, can be obtained. Unripe bananas are roasted, and of the ripe fruit, *mwenge*, a slightly intoxicating drink, is made, which is universally drunk by young and old. Honey, sesame, sweet potatoes and yams are liked, but pepper is avoided, as it is said to produce sterility; also the flesh of the hippopotamus, which it is asserted causes skin diseases. Earth eating is practiced, and the earth with which the termites arch over their passages is most affected. It is said to cure some diseases, but to produce discoloration of the skin and hair, emaciation and finally death. Tobacco smoking is universal, and the greater the chief the larger the pipe bowl, in which glowing embers and tobacco are equally mixed, which causes a considerable production of carbonic oxide and increases the narcotic effect. Until their marriage, the young Wanyoro girls go about perfectly nude. Notions of morality are mixed and simple. It is not considered disgraceful for a girl to visit her lover at night, but if he is found in her house he is beaten. If she becomes pregnant before marriage she is sent to the house of her lover till she is delivered, and if she dies in childbirth he is doomed to die too, unless he ransom himself. When a woman is pregnant and labor commences, all the women of experience are summoned to assist her. She sits on her heels, her knees stretched far apart, while one or two women support her back and arms, and the midwife sits in front of her, ready to receive the child. Delivery is promoted by rubbing over the uterus If the head presents, it is considered a good sign; if the feet present, it announces misfortune to the family. Should an arm presentation occur, it is replaced and an attempt is made to turn; this operation is performed by men, who receive special presents for the service. Should a woman die in childbirth, abdominal section is at once performed, and the child, whether living or dead, removed. Many women die of flooding, probably arising from attempts to remove the placenta. The umbilical cord is cut with a sharp splinter of reed, at a considerable distance, and is tied to the body of the child until it shrivels or falls off, which is hastened by frequent rubbings with fat. Ligature is quite unknown. The fifth day after birth the mother takes her child and sits with it on the threshold, and the name ceremonies take place. The child is suckled for eighteen months, during which time the mother lives apart from her husband. Many women are barren, and most of them have only two or three children. Unlimited polygamy is stated to be one of the causes which reduces the population. Unyoro women only bear children between the ages of 12 and 25. A son inherits all his father's wives, who become his wives, with the exception of his own mother. Theft is punished by confiscation of property for the benefit of the person robbed; murder, by the slaying of the murderer by the nearest relatives; and adultery, by the wife being beaten and a fine paid by the offender. Prostitutes are a privileged class, living under the protection of the king, and they are the servants of his wives. Though prostitution exists in all negro countries, it is officially sanctioned only in Unyoro. Private property in land does not exist. The passion for human flesh is hereditary in some families, but cannibalism is practiced secretly. These wild tribes are not free from what are often thought to be the diseases of modern life. Epilepsy is common among them, and no cure is known for it. Insanity and also mental aberrations are frequent; the latter is treated with herbal remedies, which effect an immediate cure by means of sweating and sleep. Polydactylism is rare. If the superfluous fingers are noticed at birth they are at once removed. Small-pox is much dreaded, and the pustules are opened and washed with water, but the sufferers usually die. Vaccination is quite unknown, and syphilis is very prevalent, but widespread disorganization is rare, and there is a tendency to self-healing The sores are dressed with caustic herbs and are thereby made worse. Exostosis is common, and its syphilitic origin recognized. The same is true of partial loss of pigment, which is very common in Uganda. Syphilis is said to have been unknown formerly; it has followed in the track of the Nubians.

The Wanyoro are light colored, or rather red, the shades varying from black to yellow. The legend runs that Unyoro and Uganda were formerly occupied by the Wichwezi, black-skinned cultivators of the soil, and that a white-skinned man-eating race of herdsmen, called by themselves the "Wawitu, and by the people Wahuma," came from the far northeast and conquered the Wichwezi, and from the mixed race the present light-colored people resulted. Where the emigrants have kept this race pure, as in Toru and Gambalagala they are still quite white. The Waganda of Uganda resemble the Wanyoro. The men are strong, enduring and active, clever and skilful workmen, and they are fond of drinking, dancing and music. The women are highly thought of; they have pretty, oval and orthognathous faces, rather well-developed ears, and beautiful large eyes, varying in color from light brown to yellowish grey.

The Monbuttu tribe, who live to the far west of Unyoro, are a cannibal people, or rather, they are animal feeders, and, as there are no cattle in the country, flesh food is sought after, whether it be a fat guinea-pig, a dried up ape, or a deceased relative. Bananas are, however, the staple food, and banana beer the universal

drink, though drunkenness is rare. Monbuttu women are celebrated for their fecundity, and it is stated that they bear more female children than male. Burial ceremonies are more honored in the breach than in the observance, as body-snatching is the rule. Women are held in respect, and are consulted by their husbands. Indeed, it is stated that it is surprising how a Monbuttu woman of birth can, without the aid of dress, impress others with her dignity and modesty. Circumcision is practiced in all males when they have reached their fifth or sixth year. Bleeding is stopped by the application of vegetable ashes, and by dressing the wound with the leaves of an arvid. In five or six days the part is quite healed. Both men and women mutilate themselves by cutting a piece out of the concha, and by filing a small triangular space in the upper middle incisors. Among the ruling families the heads of infants are bandaged, so as to produce a lengthening of the horizontal axis. The Monbuttu are, together with the Zande, the artists of the equatorial tribes, and in their buildings, pottery and wooden utensils, they show great skill and taste in decoration. The magnificent vegetation, and the "gallery woods" of Monbuttu, make it the El Dorado of the naturalist.

The Zande tribes to the north are inveterate cannibals. Among other tribes may be mentioned the Bari, Madi, Masai, Mittu and Shiluk. The Bari are distinguished from other negroes by artificial compression of their skulls just in front of the ears, which increases the height of the skull all along the sagittal suture.

Among the Madi and Shuli the custom prevails of erecting sheds in the villages, and here the girls go to sleep as soon as they have reached the age of puberty. The boys who have attained maturity have free access to them. Should a girl become pregnant her lover is bound to marry her, and pay her father the price of a bride. Though morality seems at so low an ebb, the Madi women enjoy a good position; they are never beaten, and are frequently called upon to give advice. Housework only is done by the women, and the fields are tilled by the men and boys.

The Nyam-Nyam, or Akka pigmies, with their poisoned arrows, vindictive disposition, and great agility of movement, are described incidentally, and Emin suggests that they are the remnants of a dwarf population which, ages ago, spread itself over Central Africa. A specimen, who was captured with difficulty, measured 42 inches in height, and his whole body was covered with thick stiff hair, like felt.

The negroes are a negative people, and are incapable of initiative. To govern them does not seem to be difficult, provided the means of access and egress to civilized countries are granted to their European rulers; but at present they are being decimated, ruined and degraded by the slave trade.

Central Africa presents as attractive a field of exploration and colonization to Europeans, and is as stimulating to the imagination, as Central America was to the buccaneers and adventurers of the sixteenth century.—*Brit. Med. Jour.*

PHENACETINE AS AN ANTIRHEUMATIC.

Dr. Colischonn, physician to the Heilige-Geist Hospital, at Frankfort-on-the Main, in the *Deutsche Med. Wochenschrift*, 1890, No. 5, says: The fact that the antirheumatic properties of phenacetine have not found the recognition they deserve, is due principally to its having been generally given in too small doses. Since he has introduced the administration of large doses, Dr. Colischonn has had very satisfactory results with phenacetine and has made no more use of salicylic acid which is so frequently disagreeable to take on account of its accompanying effects. The author himself had occasion to take antirheumatics for obstinate articulo-muscular rheumatism, e. g., 4 ounces (120.0 gms.) of salol in the course of three weeks without result, but when he, in later attacks, took two doses of 30 grains phenacetine (2.0 gms.) in the course of one afternoon, the rheumatism was done away with within a day or two.

By the digestive organs phenacetine was well very borne, with one exception, where it was discontinued on account of repeated attacks of vomiting, and C. has not seen any untoward symptoms with the exception of a few cases where profuse perspiration set in after four doses of 15 grains (1,0 gm.) each had been taken. The fever soon disappeared, the temperature went down—frequently from 1.125° 2,25° F. (0.5°-1° C.) below the normal on the second or third day—the pulse would get slower by 10 to 15 beats in the minute. An eruption was never observed.

For practical reasons C. has divided rheumatic affections into four different varieties, which may be readily defined. As will be seen from the subjoined table, the therapeutic results have been very different according to which variety each case belonged. In chronic articular rheumatism with deformity of the joints phenacetine only acted as an analgesic but not curative.

As to the different varieties these were the results:

1. Acute febrile rheumatic polyarthritis. Of 29 cases treated, 19 were cured.

2. Acute febrile rheumatic polyarthritis with swelling of the joints. Of 19 cases treated, 12 cases were cured.

3. Acute febrile muscular rheumatism (very mild cases excepted.) Of 12 cases treated, 8 cases were cured.

4. Acute febrile articulo-muscular rheumatism. Of 10 cases treated, 2 cases were perfectly cured.

Whole number of cases treated 70.

The acute articular rheumatism responds most promptly to phenacetine.

The acute febrile varieties are less favorably influenced, but least of all the articulo-muscular varieties that begin slowly and are dependent on the weather.

The author recommends to make at least one trial with phenacetine in every case, but to give it either in four doses of 12½ to 15 grains (0.75 to 1.0 gm.) each or in two doses of 30 grains (2.0 gms.) each.

In comparing the antipyretic action of antipyrin,

antifebrin and phenacetine Dr. Crombie, a surgeon in the British army (Practitioner, Oct. '89) who has administered it in cases of dysentery, intermittent fever and acute pneumonia, says in substance:

Phenacetine is the most harmless, since subnormal temperatures have never been observed by him after its use.

The action of phenacetine is the most lasting of the three.

Phenacetine is particularly indicated in all those cases in which a long-continued, though not excessively high, febrile condition arouses fears of disturbances being caused in important organs, the heart more especially, and where therefore an antipyretic is wanted, which has a reliable action that is free from untoward accompanying effects.

Besides, phenacetine has the further advantage that in those cases where the fever is complicated by restlessness and insomnia, it will cause the latter to disappear entirely and will induce quiet sleep without producing a disagreeable headache the next morning—and it does all this, even in small doses of from 1½ to 5 grains (0.1-0.3 gms.)—*N. E. Med. Monthly.*

THE GROUND-WATER AND DRINKING-WATER THEORIES OF THE ETIOLOGY OF CHOLERA.

The theories of the etiology of cholera, known as the ground-water theory and the drinking-water theory, and which are represented by the Berlin and Munich schools, continue to excite much controversy in Germany. The question of practice is the animating motive of the discussion. The theory, which attributes microbic disease to the transmission of germs by means of drinking water, is clear, simple, and definite in its indications, and, consequently, in the prophylactic measures it suggests. The Pettenkofer or ground-water theory makes the evolution of a sporadic case or of an epidemic depend on a host of factors against which it is impossible to guard.

The city of Munich has a strong underlying body of subterranean water, the variations in the level of which are constantly observed in the numerous wells in the city. The epidemic at Munich, in 1854, was preceded by a remarkable elevation, and accompanied by as remarkable a depression of the level of this subterranean water. According to the ground-water theory, a close relation exists between these facts and the evolution of the epidemic. The variation of level allows the water to permeate the soil, which it leaves humid on subsidence. The danger point is reached when the soil has attained the requisite degree of humidity. The cholera germ is innocuous when it leaves the human organism, and to infect another organism it must mature and complete a new phase of its existence outside of man and in a suitable medium. The medium is the soil, moist, aerated, and saturated with impurities.

The school represented by Koch objects to this, that the maturation of the cholera germs in the soil is purely subjective and that none of the pathogenic germs known offer any parallel to the conditions claimed for the germs of cholera. The germs of small-pox and scarlet fever pass directly from one patient to another, and one individual may initiate an epidemic. The bacillus anthracis is not only virulent when it leaves the organism of the animal whose life it has destroyed, but its virulence is increased by transmission through the same species, as has been demonstrated by the studies in septicæmia made by Coze, Feltz, and Davaine. It is true that anthrax is sometimes of telluric origin, and Koch has shown by what means the virulent microbe is conserved, but there is a vast difference between the possibility of the conservation of the bacillus in the soil and the necessity for it to pass through the soil to become virulent. It rests with the advocates of the ground-water theory to show the mechanism for the exodus of the morbid influence from the soil. Vogt attributes its liberation to oscillations in the pressure of the atmosphere, and the expulsion has been accounted for by an elevation of the subterranean level. But Noegeli, Pumpelly, Renk, and Miquel have shown that passage through a layer of humid earth filters a current of air; instead of charging it with germs. When the soil is dry the air current may take up dust in which there are germs, and attrition under the influence of sun and wind may create whirlwinds of dust, the respiration of which is dangerous. In this case the microbe must support dessication, and supposing it retained, living and virulent in the air, the means by which it is introduced into the human organism are left undetermined. The way of pulmonary inhalation must be rejected.

Cholera as at present understood is localized in the intestinal canal. The germs might be arrested by the saliva and conveyed to the stomach, but Koch has shown that they can support only a short stay there. The advocates of the ground-water theory, however, accept penetration of the germ into the organism by way of the saliva and reject the transmission by food and water.

Dr. Hueppe, in a recent work, has undertaken to find a common ground on which the two theories may meet. His conception is that the cholera bacillus may, like most pathogenic bacteria, exist in the saprophytic state. Frankel has demonstrated that it finds in the superficial layers of soil the necessary conditions of temperature, that it resists dessication and putrefaction and the rivalry of other species. It leaves the soil, not matured, as Pettenkofer claims, but vigorous and capable of resisting the action of the gastric juice, when by deglutition of saliva, respiration, drinking water, or alimentary substances it has reached the stomach. It develops in the intestinal canal, producing the toxic agents that impart to cholera its frightful character. When it leaves the human organism it ceases to be infectious and recovers its virulence by contact with the air or in the soil. If air and oxygen are deficient the germ perishes. If both are present in small quantities it can lead an aerobic ex-

istence at the expense of the materials it encounters. If by an elevation of the subterranean waters the multiplication of the germs is arrested in consequence of the diminution or suppression of air they survive or perish according to their powers of resistance. The epidemic is then extinct, or is in a condition to break out again. These variations in the conditions of development may account for the variations of virulence in the bacteria which are so important to an understanding of the *genius epidemicus* of cholers.—*Annales de l'Institut Pasteur*, Paris.

Antiseptic Syringing.—Syringing is frequently employed to diminish the septicity of a suppurating cavity or sinus. To obtain the full action of an antiseptic, it is desired to bring it into contact with every part of the wall. Hyper-distension has been frequently recommended as the only way of accomplishing this purpose. It is indeed a difficult task to syringe effectively a tortuous sinus with numerous pockets and branches. Yet we ought to beware of hyper-distension. At comparatively low pressure fluid will dissect its way along the plane of muscles or under aponeuroses. In this way less pressure than is needed to reach the farthest ramifications of a sinus may open up fresh areas of healthy tissue. By careless syringing I have seen the extent of a sinus much enlarged. Above all is it likely to do damage among the recent adhesions of an operation wound. In short, if there is not provision for the fluid to escape freely at the moment of syringing, the surgeon must bear in mind the capacity of the cavity or sinus; and remember that if this is exceeded the whole force will practically be exerted against part of the wall, and that suppuration will follow along the new track opened up by forcible syringing.—Arthur Neve, F.R.C.S., Eng. in the *Lancet*.

Extemporized Surgical Gauzes.—Hebling gives the following recipe for the rapid preparation of surgical gauzes:

Select a good material, free from oily matter, weighing about 10 drachms per square yard, and having not less than 30 threads, running each way, in the square inch. Weigh out as much of the gauze as is required, and take a corresponding weight of the antiseptic. The material should be saturated with ether or with a mixture of ether and alcohol, in which the antiseptic has been dissolved, 1 ounce of the gauze requiring 30 ounces of solution. The gauze is wrung out several times and resaturated. In drying the gauze, it should simply be unfolded and shaken a few times. All the different gauzes may in this manner be prepared, as carbolic acid, corrosive sublimate, eucalyptol, iodoform, or thymol.—*Pharmaceutical Era.*

USEFUL FORMULÆ.

Albuminuria.—For a number of years I have been accustomed to prescribe the following mixture as a routine practice in albuminuria:

℞	Potas. acetatis,	℥j.
	Chloroformi,	ʒss.
	Acid. benzoic,	ʒss.
	Aquæ,	q.s. ad ℥viij.

M. Sig.: f℥ss every four hours.

This combination has proved available, but sometimes fails; and in that case I have not found it easy to find a better. Quite recently I was attending a four-year-old boy, with albuminuria which appeared without any descernable cause. At intervals the anasarca became extreme; the whole body being swollen to the utmost extent, with the concomitant discomfort and suffering. Then the swelling would gradually subside, and the child become comparatively comfortable, though the albumen never entirely disappeared. When, at the height of a new attack of anasarca, the prescription given above failed to give any tangible benefit, I then substituted the following:

℞	Potas. acetatis,	ʒij.
	Acid. benzoic,	gr.xx.
	Sacch. lactis,	ʒiv.
	Aquæ,	q.s. ad. ℥iij.

M. Sig.: fʒj every two hours.

The result was that within two days the dropsy almost completely vanished, leaving the child in excellent condition, and free from all traces of albumen in his urine. This did not prove permanent; but in view of the difficulty of securing relief, the rapid and decided action of the lactose deserves attention.—Waugh, in *Times and Register*.

Ayer's Sarsaparilla.—

℞	Ex. sarsaparill. fl.,	℥iij.
	Ex. stillingæ fl.,	℥iij.
	Ex. podophyll. fl.,	℥ij.
	Ex. yellow dock fl.,	℥iij.
	Sugar,	℥j.
	Potass. iodidi,	ʒjss.
	Ferri iodidi,	℈x.

M.—*Chicago Druggist.*

Metrorrhagia.—

℞	Ext. fl. cann. indic.,	0.50.
	Ext. secal. cornuti.,	4.
	Ext. fl. ham. virg.,	15.
	Tinc. cinnam.,	15.

Sig.: A teaspoonful three times daily.—*Centrbl. f. die ges. Therap.*

Collodion for Fissures of the Breast.—

℞	Salol.,	3.
	Ether,	3.
	Cocaine mur.,	0.20.
	Collodion,	20.

—*Jour. de Med. de Paris.*

ORIGINAL ARTICLES.

STRETCHING OF THE SPINE AS A METHOD OF TREATMENT IN LOCOMOTOR ATAXIA.

BY CHARLES F. STILLMAN, M.S., M.D., CHICAGO, ILL.

Member of the American Orthopædic Association.

Read by invitation before the Milwaukee Clinical Society, July 8, 1890.

Much interest is at present manifested by the profession in the success of the suspension treatment, first practiced and published by Motchoukowski in Odessa in 1883, and afterwards brought into prominence by Charcot in Paris in Jan. 1889. In this country Morton, Dana, and others, have recently published valuable contributions to this subject, and a review of the cases so far collected from various sources which have been treated by this method shows a preponderance of favorable results. The treatment as outlined by these writers is simple and is easily followed. It consists in suspending the patient for a period ranging from two to ten minutes each day, or more every second or third day.

The precise effect of suspension upon the spinal cord and nerves in this disease is not as yet determined.

Dana[1] considers that "it gives a slight stretching to the nerves and an impulse to a better circulation in the cord." He also considers it a "method of treatment inferior to others in our possession."

Waitzfelder[2] considers "it hardly reasonable to suppose that the cord itself was stretched, for it floated so freely in the spinal canal that the counter-extension of the weight of the body is not sufficient to produce that result without the greatest pain." He considers "it more likely that the traction exerted on the spinal nerves in some way brings about a change in the circulation and nutrition of the cord, and the amelioration of the symptoms is due to a lessening of the vascular supply of the cord and its membranes."

Morton[3] in his report on this subject asks the following pertinent questions: "What are the effects of suspension upon the healthy spinal cord? What is the cause of the effect upon the diseased cord? Is it due to a diminution of the irritability of the cord by stretching it, and temporary; or by reason of frequent and forced reduction of abnormal irritability likely to become permanent? Whether the cord can or cannot be actually elongated? What results may be obtained in other diseases, and whether a restoration of function may not influence the condition of a lesion?"

In conclusion, he considers "the subject is but just entering upon its experimental and clinical stage, but if we accept the facts thus far reported, and if they prove to be repeated in a large number of cases, we shall be obliged to admit that the sum total of improvement and cure, be it temporary or permanent, is far in excess of that attainable by any previous means, and as such must be regarded as the most signal advance yet made in the treatment of this hitherto intractable disease."

[4]Motchoukowski is inclined to believe the improvement noticed in his cases to be due to the greater activity of the circulation induced during suspension.

He noted increased arterial tension and increased rapidity of the pulse and respiration, during the suspension of living persons, and in experiments upon a cadaver he found a lengthening of the spine between the second cervical and fourth lumbar vertebrae of 2¼ ctm.

The writer of an able editorial upon the subject, published in the *Journal of the American Medical Association*[5], Sept. 7, 1889, states that "although the status of any therapeutic measure in a disease of so protracted and irregular course can only be determined after much more prolonged observation than has been had in most of the cases thus far treated, the reported results have been, temporarily at least, so generally favorable, and the difficulty and risk of the treatment, under proper precautions, are so slight that it would seem worthy of a general trial."

He further states that "the rationale of the treatment is not very evident." Experiments have shown that in the cadaver, at least, the vertebral canal is sufficiently elongated to exert slight traction upon the spinal cord by the nerve roots, but why this should be beneficial is not quite clear. Althaus suggests that it may be due to the breaking up of adhesions in the meninges and neuroglia. For the present he considers the method must be considered empirical rather than scientific.

He also draws attention to the fact that two persons who have attempted to conduct the treatment on their own persons had died from aspyhxia, and that death has occurred apparently as the result of suspension in two other cases where it was practiced without medical supervision.

He deems it "advisable that when undertaken it should be conducted by the physician and begun with caution. Pulmonary, cardiac and vascular disease, great debility and anæmia are held to be contra-indications."

In conclusion, he states that "even if only temporary comfort can be given to any large proportion of the sufferers from this disease, it will be a great boon to both physician and patient, and so far mitigate what has been one of the opprobria of medicine."

Lydston (Chicago)[6] advances another explanation of the phenomena. He "fails to see how any of the explanations of the mechanical cause of improvement in the nutrition of the cord which have thus far been offered in the consideration of the treatment of locomo-

[1]Med. Rec., April 13, 1889.

[2]Med. Rec., June 8, 1889.

[3]Med. Rec., April 13, 1889.

[4]Vratsch, No. 17 to 21, 1883.

[5]Page 343.

[6]Medical Mirror, St. Louis, May, 1890.

tor ataxia by extension, can be consistent with our knowledge of the anatomy of the spinal column, the spinal canal and its contents. He does not believe that it is possible by stretching the spinal column to exert sufficient traction upon the loosely attached spinal cord either to stretch it, or secondarily, to stretch the spinal nerves. It appears to him impossible to exert a traction force upon the cord through the medium of the spinal nerves. Indeed the structure of the spinal canal and its contents is such, apparently, as could defeat any attempt at direct traction upon the cord or its nerves. He considers it unquestionably true, as proven by experiments on the cadaver, and as he has observed in experiments upon the living subject, that the spinal column can be extended. Now, if this extension produces improvement in the general circulation and in the nutrition of the spinal cord, and if, moreover (as he believes), it is not practicable to exert sufficient traction to stretch the spinal cord or its nerves, there seems to be some other explanation of the action of extension. He believes that extension does produce both local and general improvement in nutrition, but does not believe that this result is attained through traction upon the cord or the spinal nerves."

Admitting that it is perfectly practicable to lengthen the spinal column, he considers it is a self-evident fact that the cavity in which the spinal cord and its investments rest is increased in its capacity to a degree proportionate to the lengthening of the spinal column. The increase of capacity would be represented, so he states, by a cylinder of a length corresponding to the increase in the length of the spinal cord when fully extended, with a mean diameter corresponding to that of the spinal canal. This he considers will be admitted by all who believe that lengthening of the spine by extension is practicable. This fact having been admitted, its corrollary, he thinks, is at once obvious, viz.: That there is formed a vacuum of greater or less capacity within the spinal canal, the result of which is an aspirating or suction force along its entire length. He argues that the simplest of physicial principles explains the rest, and that there is an active determination of blood to the part, with a consequent stimulation of the function of the cord, and an improvement in its nutrition which lasts for some time after the tension upon the spinal column has been removed."

He also draws attention to the fact that "an incidental element in the improvement of nutrition is a lessening of resistance to the venous flow."

These comprise most of the theories so far advanced, but the object of this paper is to discuss the process of producing extension, rather than its physiological effects.

The employment of traction in affections of the spine is not of recent origin, horizontal couches, provided with means for stretching the spinal column, having been in vogue long anterior to the use of suspension, but the comparatively recent re-introduction of the latter principle has given it a new impetus, and traction in a straight line is now not only generally advised in the treatment of deformative conditions and diseases of the column, but also for the mechanical treatment of diseased conditions of the spinal cord itself. Traction upon a curved line, however, possesses so many advan-

Fig. 1. Stillman's Upright Spinal Extension Frame—as originally constructed.

tages over this that I am constrained to advocate it strenuously.

Several years ago, while reading a paper upon Lateral Curvature, before the Orthopædic Section of the New York Academy of Medicine,[7] I called attention to the employment of the curved board in connection with suspension as a curative measure in that deformity.

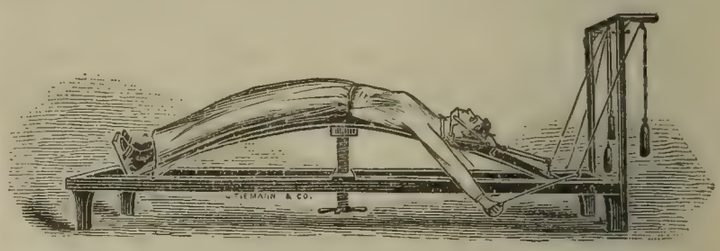

Fig. 2. Stillman's Recumbent Spinal Extension Frame—as originally constructed.

At that time I presented to the notice of the section drawings of two frames (see Figs. 1 and 2), devised by me for the purpose, and, as far as known to me, the first ever constructed upon this principle.

These frames are now formally presented to the profession for their acceptance, but as they differ in some minor details from those originally devised, and as their range of application has since been so greatly enlarged, I have deemed it expedient to bring their claims prominently forward through the medium of this paper.

It will be noticed that they consist of curved boards, against which the patient leans, the curve being increased or diminished by means of a strong screw.

Traction is effected by means of pulleys and weights

[7]The Medical Record, May 21, 1887.

attached to a sling passing under the chin and occiput. The arms may remain free for exercises with dumb-bells, elastic cords or pulleys and weights, or slings may also pass under the axillæ, as in the Sayre method.

It will readily be seen that if the posterior surface of the trunk is placed against the curved board, and traction on the spine is exerted by means of the pulleys and weights, the spine will be in a state of extension, the chest capacity will be increased and abdominal muscles stretched, with a minimum of fatigue to the patient.

Fig. 3. Stillman's Upright Spinal Extension Frame (posterior curved position).

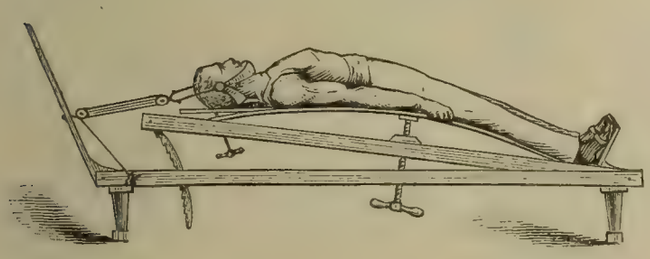

Fig. 4. Stillman's Recumbent Spinal Extension Frame (posterior curved position).

These frames have been, according to their construction, designated by me as the upright and recumbent, respectively. The recumbent (see fig. 4) is constructed upon the same principle as the upright, but a longer continuance of the traction is permissible while resting upon it than when the upright form is used, and it is, therefore better adapted for patients of delicate physique and those in advanced stages of disease.

It should not be lost sight of that in the use of these frames the patient is combining rest with traction in a greater degree than is possible in suspension by the Sayre method.

The changes in form of the spinal column under the influence of traction may chiefly be referred to two causes, viz.: the character of the intervertebral substance and ligaments connecting the vertebræ—and the shape of the vertebræ.

The intervertebral substance at its circumference is composed of fibro-cartilage and fibrous tissue, disposed in laminæ, these being arranged concentrically one within the other, with their edges turned toward the corresponding surfaces of the vertebræ. The plates of which these laminæ are composed are not quite vertical in their direction, those nearest the surface being curved outward, and closely approximated, protection being thus secured for the vertebræ in case an unsuspected jar or impact is received by them while the spine is curved.

The center of each intervertebral disk is composed of soft, elastic, pulpy matter, and the combined effect of the circumferential and central composition of the intervertebral substance is to produce an elastic, tough material, which is both extensible and compressible in its nature, acting as an elastic "buffer" between the bodies of the vertebræ, while superincumbent weight is borne upon the spinal column, allowing elongation of the vertebral column during traction.

The natural curvatures of the spine in the neck and loins are due in a great measure to the variation of the intervertebral disks in shape, size and thickness.[8]

In *shape* they accurately correspond with the surfaces of the bodies between which they are placed, being oval in the cervical and lumbar regions, and circular in the dorsal.

In *size* they are greatest in the lumbar region. In *thickness* they vary not only in the different regions of the spine, but in different parts of the same region; thus they are uniformly thick in the lumbar region; thickest in front in cervical and lumbar regions, which are convex forward and behind, to a slight extent, in the dorsal region.

The cervical and lumbar regions are thus necessarily given a greater freedom and pliancy of movement than the dorsal region, which has, in proportion to its length, a much smaller quantity of intervertebral substance than the other regions, and whose concavity is chiefly due to the shape of the bones of the vertebræ and not to the shape of the intervertebral disks.

As the intervertebral disks form about one-fourth of the spinal column, exclusive of the first two vertebræ, and as they are both compressible and extensible, it will readily be seen that they exercise a very important influence upon the production of extension of the spine. And here it should be understood exactly what is meant by the word extension in this connection. Extension is a word used to define the condition of a joint, or any portion of the body, produced by traction exerted in such a manner as to stretch it.

Traction is the active cause; extension the result—and it should not be confounded with the same word when used to express the motion of a limb as opposed to flexion. In addition to the intervertebral substance, the ligamenta subflava should also be given prominence as a factor in allowing the vertebral column to be

[8]The writer is indebted to Gray's Anatomy for the accuracy of these descriptions.

elongated by traction. They are interposed between the laminæ of the vertebræ from the axis to the sacrum, and consist of yellow elastic tissue, the fibres of which are almost perpendicular in direction. In the cervical region they are thin in texture, but very broad and long; thicker in the dorsal region, and in the lumbar region are noticeably so.

These ligaments are very elastic, serving to preserve the upright posture, and to assist in resuming it after the spine has been flexed. When traction is exerted during posterior curving of the spine the extension condition is allowed to be produced mainly by the elastic nature of the intervertebral disks and this is limited chiefly by the resistance of the anterior common ligament.

In the same manner, when traction is exerted during anterior curving of the spine the extension condition is allowed mainly by the elastic nature of the ligamenta subflava and is limited chiefly by the resistence of the supra-spinous ligament. The construction of the capsular ligaments is also such as to permit this stretching to be accomplished. They are thin and loose ligamentous sacs attached to the continuous margins of the

Fig. 5. Upright Spinal Extension Frame. (Anterior curved position.)

articulating processes of each vertebra through the greater part of their circumference, and completed internally by the ligamenta subflava. They are longer and more loose in the cervical than in the dorsal or lumbar regions, and are lined on their inner surface by synovial membrane.

Attention is called to those ligaments particularly because in anterior curving of the spine it will be noticed that their sac-like construction does not interfere with the gliding upward of each inferior articular process of the vertebræ upon the articular process of the vertebræ beneath, and does not oppose an obstacle to the stretching of the ligamenta subflava.

In the treatment of locomotor ataxia I wish strenuously to advocate the use of the curved board, combined with traction, and I contend that if suspension in a direct line, according to the Sayre method advocated by Charcot and Motchoukowski, exerts an appreciable influence in either elongating the spinal cord or stretching the spinal nerves, traction exerted upon the spine, while it is curved anteriorly, with the patient resting comfortably during the process, will produce much more marked results. We have already described the ligamenta subflava in a preceding portion of this paper, and we will now proceed to study their relations to this procedure.

The proximity to the spinal cord of this very elastic ligamentous structure should be borne closely in mind, for if any actual elongation of the cord or the spinal nerves does take place during traction, it must be due to the stretchable quality of these ligaments, which lie so close to the spinal canal.

I contend that the cord will be more elongated by traction in the anterior curved (see Fig. 5), than in either the posterior curved or vertical positions of the spine, and in support of my position a glance at the vertebral column in its entirety and in its relation to the spinal cord is necessary.

Fig. 6. Recumbent Spinal Extension Frame. (Anterior curved position)

The spinal cord is the cylindrical elongated part of the cerebro-spinal axis contained in the spinal canal. It does not completely fill this canal, its investing membranes being separated from the surrounding walls by the areolar tissue and a plexus of veins, and it occupies in the adult only the upper two-thirds of the canal extending from the foramen magnum to the lower border of the first lumbar vertebra, where it terminates in a slender filament of gray substance which is continued some distance into the filum terminale.

The spinal canal is posterior to the main portion, *i. e.*, the bodies and their intervertebral cartilages) of the vertebral column, and this is an anatomical feature to be emphasized, because on account of this arrangement it is plain that a given amount of traction exerted on the column in an anterior curved position (this anterior curving or "flexion" of the spine being the most extensive of any of its movements, and freely permitted in the cervical and lumbar regions) must result in greater elongation of the cord itself, situated behind the vertical bodies, than an equal amount of traction exerted with the column in any other position.

We will now place a patient face downward (Fig. 6) upon the recumbent traction frame in which the curve of the board is made to correspond as nearly as possi-

ble to the normal curve of the spine in the dorsal region. Owing to the flexibility of the cervical and lumbar regions first referred to, the cervical and lumbar vertebræ assume the same arc as the dorsal, and we have the entire vertebral column describing one curve.

Next secure the patient's feet to the footboard and apply traction to the spine by means of weight to the head. It will be seen by the measure which has been lain out in inches upon the board, that by the traction the body has been elongated several inches. Some of this is attributable to the stretching of the lower extremities, but a portion of it has been accomplished in the vertebral column itself. If the screw is now gradually turned so as to increase the curve of the board, we find that the distances between the spinous processes become increased in proportion as the arc is increased by the screw; and since the center of the arc of this stretched spine is anterior to the column, it follows that there is more traction exerted upon the spinal canal and its contents, than upon the anterior portion of the column.

In Sayre's suspension, as advocated by Charcot, we depend for extension of the spine upon the stretchable qualities of the tissues other than osseous and white fibrous, of which the spinal column is composed, while in the method here advocated we have in addition to the increased anatomical advantage of the anterior curved position itself, a more accurate method of graduating the traction while the patient is in a position of comfort, and not one of torture or danger.

The question of rest during traction has never been broached by advocates of Sayre's suspension, because it is an impossibility during that process. On the other hand, during traction upon a curved board it is not only possible, but is an advantageous feature of the treatment.

The importance of rest in the treatment of this disease has been advocated by Professor D. R. Brower, of Chicago, in a clinical lecture[9] published last year. He states that "in the early history of these cases, before the ataxia is manifest, when you can recognize by certain symptoms the beginning of the disease, when, in other words, you have an impairment of the reflexes, disturbance of the color sense, dysæsthesia, throughout the body, impairment of tactile and pain sense, mental depression and irritability of disposition and severe localized pain, you may do something for your patient, and sometimes cure him. If you treat the disease vigorously in the pre-ataxic stage, you can even now and then arrest it. You do this by putting the spinal cord as nearly as possible in a state of absolute rest.

"Put your patient to bed and keep him in a horizontal position. By judicious massage and Faradic exercise of the muscles prevent the possibility of their wasting; and give him at the same time such internal treatment as is indicated and in accordance with the etiology of the case."

[9]Medical and Surgical Reporter, Philadelphia, April 28, 1888.

Rest in the recumbent position, so strongly recommended in the paragraph just quoted, is perfectly feasible upon the recumbent frame, in addition to the traction which can also be applied at the same time and without impairing the patient's comfort.

I would advocate in the treatment of locomotor ataxia, in addition to the constitutional treatment:

1. The use of both the erect and recumbent curved traction frames as being superior both in principle and practice to the Sayre suspension apparatus employed by Motchoukowski and Charcot.

2. The use of traction while the spine is curved anteriorly, to produce the greatest possible degree of elongation of the cord and spinal nerves consistent with a requisite amount of rest, comfort and freedom from danger.

3. The use of traction while the spine is curved posteriorly, to increase the vital power.

4. The use of appropriate gymnastic exercises during the curved traction to restore impaired muscular function and improve general nutrition.

5. The use of appropriate forms of electricity and massage during traction[10].

Fig. 7. represents the patient exercising upon the upright frame while traction is being exerted upon the spine.

Fig. 8. represents the recumbent frame in use. Fig. 9. represents a brace designed by the writer to overcome the flexion almost constantly met with in these cases.

The object of this apparatus is the restoration of the normal curves of the back, and the mechanical problem thus presented is resolved into the reduction of the dorsal curve, since the cervical and lumbar are merely compensatory and tend to regulate themselves.

We must strive to keep the patient in the hyper-erect position until the muscles have been exercised and invigorated sufficiently to render the use of a brace unnecessary, and a satisfactory method of utilizing the backward traction in the formation of the brace is one constructed on my adjustable "V" lever plan—the fulcrum to be over the sacrum, the resistance to be greatest just below the central region of the dorsal curve, and distributed all along the spine below this region, and the power to be the forward tendencies of the upper extremities and head, so that while the body is maintained erectly no force is exerted upon the spine at any point, but the least tendency to rounding the shoulders brings a power to bear exactly opposed to the power of deformity, which increases automatically in proportion to the extent of the deformative force.

[10]On the subject of electricity in the treatment of this disease, Stembo (Berliner Klinische Wochenschrift, Oct. 29, 1888) states that "although so much is written concerning tabes, yet but little appears as to its treatment."

He considers "electricity to be by all means the best treatment for tabes, and that the constant current has been chiefly employed in Germany, England and Russia, while the interrupted current is used in France and also in America."

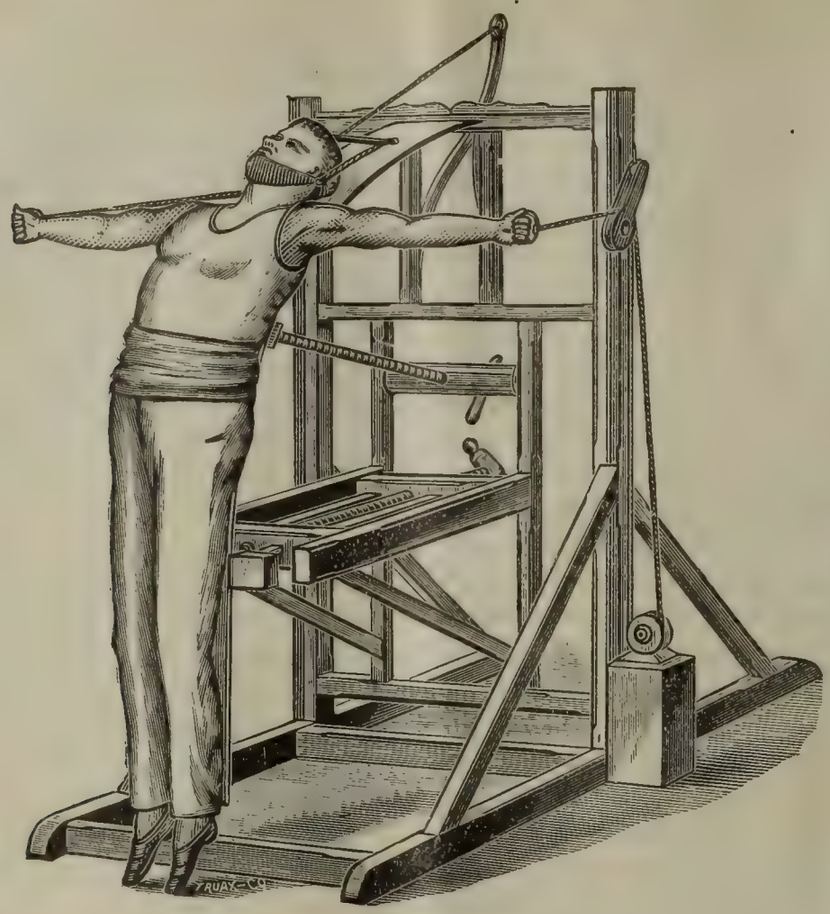

Fig. 7. Stillman's Upright Frame for Exercise during Extension of the Spine.

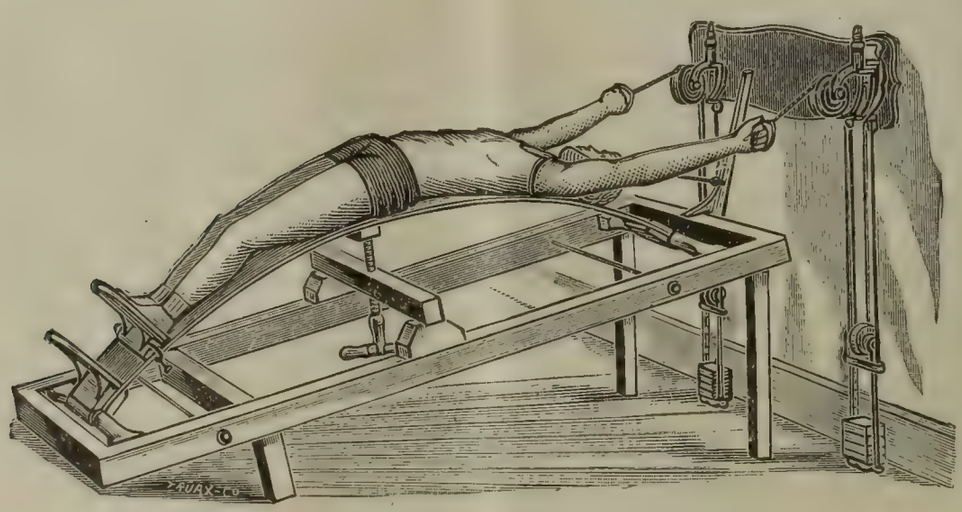

Fig. 8. Stillman's Recumbent Frame for Exercise during Extension of the Spine.

To construct a brace so as to bring the force to bear under these conditions we place a girth, provided with a sacral projection, about the hips (Fig. 9). From the upper edge of this hip-girth springs a pair of padded strips, one on each side of the median line, so as to avoid the spinous processes, and these strips extend upwards to the middle dorsal region, terminating in a pressure pad.

In order to give it efficacy we must also supply a frame for backward traction as a substitute for the backward force exerted by the weight of the upper extremities when the body is in the traction position.

To effect this, a light steel frame moulded to the shape of the back, and extending from the sacrum to the cervical vertebræ, is attached at its lower extremity to the hip-girth (as in Fig. 9), and there provided with ratchets, which admit of its being secured at any angle. The upper extremity of this frame is secured to the body by means of axillary crutches terminating in pads over the acromion processes.

The action of the brace is that of a lever exerting its force in such a manner as to distribute its pressure along the spine, the dorsal center being the point of greatest pressure, and the sacrum the least, the intermediate pressure being so graduated as to decrease from the dorsal center to the sacrum. We thus see

that direct pressure is provided to the greatest degree where it is needed most—*i.e.*, at the dorsal center—and in the least degree where it is needed the least—over the sacrum; and there is thus no portion of the spine below the dorsal center without direct support. This support and forward pressure is just in proportion to the backward angle of the brace-frame and the forward tendencies of the deformity. In the beginning of the treatment the brace-frame may be secured at a considerable angle, but as improvement ensues this may be lessened until it lies flat upon the strips and becomes in its action a mere spinal support instead of a lever.

This brace makes an extremely effective and comfortable instrument, and can be made to exercise any desired degree of power on the deformity.

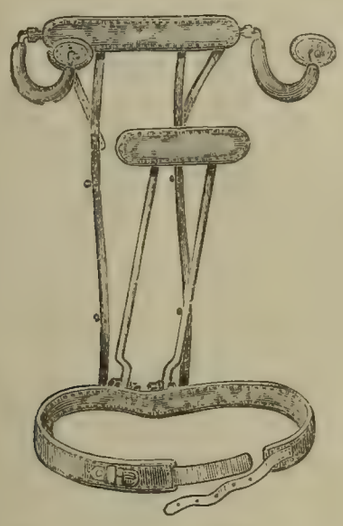

Fig. 9. Stillman's Brace for Locomotor Ataxia.

The use of a properly constructed brace to overcome the flexion, which so constantly presents itself in locomotor ataxia, was first suggested to me by Professor E. C. Seguin, then of New York, now of Providence, R.I., in the spring of 1886. I then applied to a patient, Capt. B., of Richmond, Va., who was sent to me for the purpose by Prof. Seguin, a brace such as is described above, and at that time more with the idea of reducing deflection than making extension of the spine. I placed the patient upon a curved board in the posterior curved position (see Fig. 2) and exerted traction for from five to ten minutes at a time.

In looking over some old letters recently I found one from Professor Seguin, dated June 14, 1886, in which he remonstrates with me for stretching the spine in this case, as he considered it injurious unless it was with the idea that some osseous vertebral complications existed. I afterwards applied the stretching process to another locomotor ataxia patient the same summer, but in both cases I ascribed the slight improvement which followed to the reduction of the deformity by the stretching on the curved board and by the brace combined. I am, however, now inclined to believe it to have been due to the effect upon the nervous system in addition to the improvement in the flexion of the spine which took place.

There should also be a few words said about the management of cases too far advanced to come to a surgeon's office for treatment. It is a very important point that these patients should have daily exercise in locomotion. The lower extremities, however, are in many cases unable to fulfill their functions of carrying the weight of the trunk and upper extremities. And, to allow these patients to obtain sufficient exercise without leaving their rooms, an ordinary crane should be

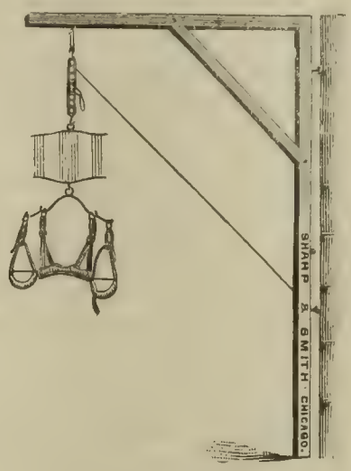

Fig. 10.

provided, which is to be swung from the side of the wall by gate hinges, thus allowing the frame (or derrick) to swing through an arc of 180°, or even more if the joist to which the crane is attached be set out from the wall into the interior of the room. To the extremity of this crane an elastic suspension apparatus should be attached provided with pulleys by means of which the patient may be suspended to any required degree (see Fig. 10). It will readily be seen that by this arrangement most of the superincumbent weight may be lifted off the lower extremities and the patient can exercise in walking and swinging with little fatigue, at the same time that the spine is in a state of extension. This apparatus should, however, not be used alone, but in connection with the recumbent curved extension frame already described (see Fig. 4).

125 State Street, Chicago.

REPORT ON PROGRESS.

GENITO-URINARY SURGERY.

BY ELSWORTH S. SMITH, A.M., M.D., ST. LOUIS, MO.

At the fourth annual meeting of the Association of Genito-Urinary Surgeons, the discussions involved several questions which are at present considered largely *sub judice*, and it was thought that a presentation of the positions assumed upon those unsettled points by the different members would be an appropriate subject for this report, and will, therefore, be the purpose of what follows:—*Boston Med. and Surg. Journ.*

Tuberculosis-Uro-Genitalis.

As to the pathology of this affection the majority were of the opinion that it was a local manifestation of a general malady.

The president, Dr. J. P. Bryson, of St. Louis, in a paper in which he treated the subject from a clinical standpoint, among other conclusions, draws the following:

1. That the pathogenic factor reaches the part involved by the hæmatic channels.

2. That more than one organ of the uro-genital system is affected very early in the history of the disease, perhaps simultaneously.

3. That the prostato-vesical and peri-prostatic regions show by far the greater liability to early involvement.

4. That all the evidences point to the conclusion that we have to deal, even in its earliest recognizable stages, with a general disease, which manifests itself by localization.

Dr. E. L. Keyes, New York, was of the opinion:

1. That local tuberculosis was evidence of the fact that the person was already, by inheritance, endowed with the tubercular soil, and that had he not gotten this local infection, he would be liable, under appropriate circumstances, to have general tuberculosis, by reason of the tubercular soil.

2. That the localization was generally determined by the diminished physiological resistance of the part, engendered either by trauma or by some grade of inflammation, as shown by the not at all uncommon manifestation of tubercular disease about the prostatic regions and urethra after gonorrhœa.

3. That the bacilli descend with the physiological current of the blood from the bladder, and finding the proper soil near the neck then fasten themselves.

Dr. A. T. Cabot, Boston, said that the frequency with which the prostatic and prostato vesical regions were affected seemed not to point so much to the fact that the disease frequently started there, as to the fact that the prostate was, so to speak, the cross-road between the genital and urinary systems; that in case of a tuberculous kidney or testicle, the escaping bacilli would pass along the prostatic region.

In accordance with the opinions of the pathology expressed above, the treatment recommended was conservative. Early operations, with a view of radical cure, were generally condemned.

Dr. Bryson did not believe that an operation, however extensive, undertaken with a view of excising the lesions and thereby radically curing the disease, could be successful, but he was still of the opinion that our chief resource lay in general anti-tubercular treatment, reserving surgical interference for the palliation of bleeding or wasting suppuration. Under proper hygienic and medicinal treatment, Dr. Keyes had seen a number of patients recover from tuberculous disease of bladder and prostate, seminal vesicles and testes. He believed in relieving any tension about a tuberculous focus, and, if necessary, resorting to the curette; but he was opposed to extirpation of the testicles, as he was not of the opinion that this procedure led to the development of the trouble in the other side. The use of the curette, however, would have a tendency to cure the local lesion and add to the patient's comfort, although the disease might still progress. Great improvement would also be obtained from change of habit, use of tonics, out-door life, etc.

Dr. Cabot agreed with Dr. Hayes in being opposed to ablation of the testicle, and for the same reason. He would operate only when the extent of the lesion became a drain to the system. When ulcerated surfaces did not tend to heal, he would resort to the curette. The cases in which he had good results had almost invariably been in consequence of change of habit.

Dr. L. B. Bangs, New York, had not only seen ablation of a tuberculous testicle followed by the development of the disease on the other side, but had also seen a violent outbreak of general tuberculosis follow slight interference in individuals presumably in good health, with the exception of a nodule on the testicle. He was, therefore, opposed to operative measures unless the lesion of the testicle or other organ was within reach of surgical interference, was a drain to the vital powers from suppuration or intense pain.

Dr. J. Wm. White, Philadelphia, was not inclined to be a conservative. He distinguished two varieties of the disease, the one the rapidly fatal miliary tuberculosis; the other, the slow scrofula or chronic tuberculosis; the latter, which was the form most frequently found affecting the genito-urinary system, was amenable to surgical treatment. He failed to see why on *a priori* grounds, a radical operation should have any greater tendency to be followed by a return of the disease than a more partial one.

Dr. R.W. Taylor, New York, recommended the taking of the middle ground between the two extremes, of early excision and of temporizing.

Circumcision.

In bad cases of chancroidal phimosis, Dr. Taylor recommended the lateral operation, that is, cutting well back, with scissors, to the fossa at the base of the glans on each side. Cauterization was not resorted to, but the parts were well soaked in warm water, washed with 5% carbolic acid, dusted with iodoform and dressed. The upper flap, which corresponded to the upper half of the prepuce, soon withered up into a small triangular shaped piece, which was to be removed after healing had well advanced, and three or four sutures were placed underneath in a semi-circular way. By this process he had saved the integrity of many organs, where the ordinary circumcision would have produced greater or less destruction. Dr. White endorsed this method, especially when the integrity of the organ seemed threatened, but recommended the application of a solution of chloride of zinc, 30 or 40 grains to the ounce,

applied to the freshly cut surface, when by coagulating the albumen prevented sepsis during the first few days, while granulation was forming.

Report of Six Cases of Perineal Section.

Dr. J. Wm. White, in a paper on the above subject, recommended (1) Supra-pubic cystotomy and retro catheterization, when persevering search failed to reveal the proximal torn end of the urethra. (2a) The use of the retained catheter after all operations connecting the urinary tract with the surface of the body; which, kept clean and not allowed to project too far into the bladder, would aid in the prevention of urethral fever. (b) Regular catheterizations at short intervals begun soon after the removal of the catheter first introduced. (3) The suturing of the urethra in cases of rupture. (4) The sterilization of the urine with boric acid or salol, combined with full doses of quinine in the after-treatment of these cases. Dr. W. T. Belfield, Chicago, thought that in case of failure of reasonable effort at finding the inner end of the urethra, it might be well to make an incision at the point where the urethra should be; as when the bladder end could not be found it was probably so nearly obliterated by the growth of cicatricial tissue, that it was not of prime importance to seek it and endeavor to restore it.

When the bladder end of the urethra could not be found, Dr. Cabot in several cases, having evacuated any collections of pus, had deferred operation, and after a week or two had been able to find the inner end of the urethra.

Dr. Bangs was opposed to the retention of the catheter, as it gave rise to traumatic urethritis in the anterior part of the urethra. Both he and Dr. Keyes agreed as to the propriety of perineal section promptly made, in cases of moderate drainage to the urethra from traumatism, to prevent dense, tough and troublesome stricture later. Dr. Keyes also expressed his preference for drainage by a tube through the perineum as the retained catheter must necessarily be too small; his method being to introduce as large adrain as possible.

Removal of the Third Lobe of the Prostate with Complete Restoration of the Functions of the Bladder.

In this case, reported by Dr. F. N. Otis, of New York, there was a history of slight urethritis in boyhood and frequent urination dating back ten years. In 1887 internal urethrotomy for stricture, and in 1888 lithilopaxy for vesical calculus. Relief from these operations was only temporary. Patient came under Dr. Otis' observation in October, 1889, debilitated; urine ammoniacal loaded with pus and mucus but containing no kidney elements. Retention present. No enlargement of prostate could be detected nor any stone or pathological change in the bladder. Cystoscope, however, revealed, at several examinations, a dark, irregular and indurated spot about the size of a dime on the left side of the *bas-fond*. This fact, together with the persistence of the symptoms, determined an exploratory operation, which was performed November 22. The suspected points in the *bas-fond* proved to be an encysted calculus, which was removed. A well marked enlargement of the third lobe of the prostate was recognized, but not removed, as the patient had been passing a large amount of urine of low specific gravity and his general condition was bad. Recovery from operation was satisfactory. Upon a return, however, of the symptoms, a supra-pubic section was made in January, 1890, the bladder was explored and phosphatic stone removed. Perineal section was then made as a second step in the operation, and the enlarged median lobe removed. Convalescence tedious, on account of an attack of sub-acute pleurisy. About April 1 patient returned home cured, with exception of slight vesical catarrh.

Notes on the Technique of Supra-Pubic Cystotomy and Prostatectomy.

Dr. W. T. Belfield, Chicago, summarized his method of procedure as follows:

1. Body upon inclined plane; pelvis eight or ten inches above shoulders.
2. Bladder moderately distended.
3. Rectum not distended unless it be necessary to raise base of bladder.
4. Incision about one and one-half inches above upper border of symphysis, and extending some distance below it.
5. After division of deep fascia finger inserted along posterior surface of symphysis until pubio-prostatic ligaments reached, then the vesical fat pushed upward along anterior surface of bladder, carrying peritoneal fold, if present, with it.
6. Bladder attached to upper angle of wound by suture, preferably through muscular coat only; chromic catgut suture then inserted, so as to make a subsequent quilt suture. Incision in bladder is close to symphysis.
7. After necessary intravesical manipulation, the boutonniere is made. Tube one-half inch in diameter with two large lateral openings introduced over large uterine sound to the most dependent portion of bladder, fixed by sticking through skin.
8. Bladder wound closed by the quilt suture already inserted, and by several additional interrupted sutures. Retro-pubic space irrigated. Iodoform gauze inserted, wound closed and dressed antiseptically.

Dr. J. W. White was inclined to still use the cylindrically elongated rectal bag, as it gave a firmer support behind and made easier the recognition of small growths.

Dr. Otis thought it safer not to fill the bladder until the patient was well under the anæsthetic. If the bladder was very small he preferred lifting it up through the wound on a sound, as it was easier to examine a

contracted bladder in this manner than when it contained only a small amount of water.

Dr. Cabot thought the rectal bag dangerous, and that it should be used with great care. He preferred the pear-shaped to the sausage-shaped variety.

Dr. Bangs favored the use of the rectal bag, as it facilitated some steps in the operation, and in old men celerity of operation was very important. He had forever become conservative with regard to prostatectomy, as he had observed that after removal of a stone from a bladder which had previously been unable to spontaneously evacuate itself, the bladder had recovered its function so that the amount of residual urine would be slight and perfectly limpid.

Drs. Belfield and Watson were in favor of removing the enlarged third lobe, because it was the cause of the obstruction, and because they did not think the procedure added much to the gravity of the operation.

Dr. Bryson thought that the general health and condition of the kidneys must determine the surgical procedure. Heart failure he considered the chief cause of danger.

A Case of Cystitis, with Formation of A Thick Epidermal Sheet in the Bladder.

Dr. Cabot, in presenting this case, distinguished it from the cases described by Guyon as membranous cystitis, in which the sheet was fibrinous, while in his case it was a thickened epidermal layer. Both Drs. White and Watson thought that the proper treatment of such a case, when one was quite sure of the diagnosis, was the supra-pubic operation.

A Case of Severe Hæmaturia. Nephrectomy by Dr. McBurney.

This case was reported by Dr. F. Tilden Brown. The most prominent symptom was a severe hæmaturia which had occurred on three different occasions. Third attack was diagnosed as calculus by Dr. Brown. Nephrectomy was undertaken by Dr. McBurney for removal. No calculus could, however, be discovered, and nephrectomy became necessary to arrest fatal hæmorrhage. Patient, after passing through some complications eventually made a good recovery. The interesting feature of the case was found upon examination of the specimen by Dr. Delafield. The only cause for the severe hæmaturia that he could discover was a chronic pyelitis, originated, probably, by a calculus, long since passed, but leaving an inflamed condition of the pelvis, in his opinion sufficient to account for the severe hæmaturia. For this hitherto unrecognized variety of kidney lesion, capable of giving rise to such severe hæmaturia, Dr. Brown would suggest "chronic pyelitis, with acute hæmorrhagic exacerbations," as an appropriate name.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., Editor. W. C. MARDORF, M.D., Associate Editor.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Original Articles, Reports of Cases, Correspondence, etc., relating to interesting medical topics, are cordially invited.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, SEPTEMBER 6, 1890.

Ideal Medical Journalism.

"Full many a gem of purest ray serene,
The dark unfathomed caves of ocean bear;
Full many a flower is born to blush unseen,
And waste its sweetness on the desert air."

Startled at the possibility of such being the fate of the following bit of artistic word-painting—a masterpiece, as it is, of 'English as she is wrote'—we hasten to cull it from the modest medium which gave it birth, and do our part towards laying it before the attention of an appreciative world.

How graphically does it portray the impending *entree* into the journalistic arena! One can almost follow the several stages of corporeal flexion in the dignified bow that is being made; can almost calculate with mathematical precision the angle of inclination that is being evolved.

But the stores of our admiration are hardly touched until we come to the body of the article—the lucid and perspicacious logic that tells just where a medical journal should stand in relation to this unsympathetic vale of tears. Then, oh! then does he strike a responsive chord—does he tap the barren rock and bring forth a crystal flood of admiring approbation.

We delay thee no longer, gentle reader; feast thine eyes and thy soul; thy more carnal appetites will ask no refreshment after partaking of this ambrosial dish:

"On Journalism.

Our opinion of medical journals, is, that they should be edited by experienced physicians, as this journal has been, but I have found too many the reverse.

With the former editor's experience as such and a practitioner I will say, we expect to be second to none.

Now as I started to say, a doctor with a large practice could not afford to give his time alone to the journal, but the young practitioner can give more time than he can food for the science of medicine and surgery. But in order to have men with experience to run a journal, it is necessary to have more than one. So not only the families, but the journal will receive the proper attention, by having the work divided. With ten years' experience in the practice of medicine, I feel that I am unfit and unprepared, but am not unwilling to prepare myself, as I did for the profession. I am not opposed to, or against the young practitioner, but am for them, because I am one of them. As to whom I am for, is—First, the honest practitioner. He should not seek for any office that does not pertain to his profession, nor be hoggish for the worldly goods, but value his services, and the services his brother doctor gives, and demand the worth of it; therefore the same will hold good in journals. The price should be enough to pay for remittance.

The minister of the gospel should not be dictated to, they are kind to each other, and labor continuously and zealously to fraternize the world. But their efforts sometimes fail to accomplish this humane purpose in our profession.

The lawyers, last but not least, are unlike the doctors. The lawyer would say, "Oh! he will make a good lawyer some day;" in other words, "When I am out of the way."

Many times have I heard the senior physicians use such expressions of the junior. Ten years ago the writer who has feelings that are kindred to the human family, often heard such unkind remarks. It grated upon his nervous system, but now they are as a tale that was told.

With this article of criticism, I subscribe myself as one of the newly initiated editors. * * *."

The Transplantation of Skin.

The procedures recommended for the transplantation of skin are many and various, and the results which attend such efforts are not always satisfying to the same degree. Dr. Eulogio Cervera, of Ruiz, describes a method (*Regista clin. d. l. hasp. de Madrid—Deutsch Med. Zeit.*) which he has adopted after much experimentation, and which has yielded him excellent results, even in the most stubborn ulcers. He describes his method as follows:

1. Before the operation the most rigorous antisepsis must be employed, by frequent washes with soap and water, and hot sublimate solutions, covering the ulcer in the interval with borated vaseline.

2. Two days before the proposed transplantation the corrosive sublimate solution is replaced by hot water in washing, so as to avoid the coagulating action of the mercury salt.

3. The use of hot water is to be continued until complete recovery.

4. Local anæsthesia, as recommended by some, should not be employed, as it might injure the vitality of the cells to be transplanted.

5. For obtaining the pieces of skin it is best to use a knife with a broad, smooth blade.

6. On the day of operation the whole granulating surface of the ulcer should be removed by the sharp curette, after which

7. Gauze, sterilized by heat, is applied to the ulcer and gently pressed on until all hæmorrhage and transudation from the vessels has ceased. This procedure is of considerable importance, as the result of the operation depends upon it to a considerable extent. The transplanted bits of skin will not grow fast where there is any fluid between them and the ulcer surface, whether it be blood or serum.

8. The portions of skin may be obtained from the arm, either of the patient or of another.

9. The whole surface of the ulcer should be covered with skin, so that not the smallest portion lies exposed.

10. During the transplantation care should be taken to drive out any air bubbles adhering to the under surface of the skin, as these may easily prevent a good result. If any remain behind they may be removed by gentle pressure with a thin spatula.

11. At the close of the operation the ulcer is covered with a piece of blotting paper, which has been antiseptically treated, and the fragments of skin immobilized by a firm gauze dressing. This may remain a week before redressing, and the second dressing may be allowed to remain for two or three weeks when healing will probably be complete. To avoid disturbing the fragments of skin at the first dressing, the blotting paper may be gently raised, a little at a time, by means of a spatula. It is, of course, understood that the part from which the skin is taken is to be rendered thoroughly aseptic beforehand.

The author appends the report of an operation after this method upon a young girl, æt. 9 years, the whole of whose upper thigh was exposed by burns; recovery was rapid and complete.

The Treatment of Facial Acne.

Renaut says (*Revue gen. de clin. et thir.—Med. Chir. Rundschau*) that for the successful treatment of acne two indications must be met; first, the congestion of the skin should be reduced as far as possible; and, second, all causes should be removed which tend to a hyperæmia of the skin. Among the external remedies we must include, above all, a rational care of the skin, somewhat as follows: The face should be washed, morning and evening, with water as hot as it can be borne, by means of a fine sponge. After the washing the skin should not be dried; it becomes at first very hyperæmic, but as soon as evaporation begins, the blood-vessels contract again, and little by little they re-

gain their loss of tone. In severe cases the following mixtures are to be employed:

℞ Hydrarg. chlor. corros.
Ammonii muriatis - - - aa 0.1
Emuls. amygdal. amar. - - - 200.
(Liquor Gonlandi).

M. To be applied morning and evening.

Or we may use the following, to be applied in the same way:

℞ Aquæ destill. - - - - - 250.
Sulphur sublim. - - - - 30.
Ætheris sulphur. - - 10–12–15.

In those cases in which these solutions have no effect the last refuge is in scarification. By this the congestion of the skin is for once completely removed, and, on the other hand, the acne pustules are placed in the best possible condition for resolution.

As far as diet is concerned, all spiced and salty articles are to be forbidden. Alcoholic drinks should under no circumstances be allowed. Care should be taken to secure regular and free evacuation of the bowels.

The Determination of Sex.

The question of the determination of sex is one of great interest, and has brought forward a number of explanatory theories, which, one and all, fail to explain. An investigator of Houston, Tex., named Fiquot, has advanced a theory, which seems plausible enough, that the animal which is most passionate during coition determines the offspring to be of the opposite sex. This theory has found many adherents, among them a German physician, G. Herz, who has endeavored to substantiate his belief by numerous experiments on the lower animals. Among the cattle he has attained a difference in the passions of the two sexes by systematically regulating their care and diet (*Arch. f. wiss. u. prak. Thierhk.—Med. chir. Rundschau*). If a male offspring was desired he fed the cow to the utmost with nourishing food, while the bull was restricted as to fodder and was used as much as possible in the impregnation of other animals. If a female animal was desired, the bull was well fed, and separated from the females of his kind, while the cows intended for him were put on a low diet, and weakened still more sexually by allowing a castrated bull among the cows, which aroused their sexual inclinations without satisfying them. The author claims to have succeeded in his aims in 32 cases. These results the author corroberated by experiments with goats, which likewise proved successful. All details as to age of animals, etc., are given to the original papers.

Treatment of Strictures by Linear Electrolysis.

At the Berlin Congress in the section for surgery, Dr. Fort of Paris read a paper on the treatment of strictures by linear electrolysis. This surgeon claims to have operated on 700 strictures of the urethra without a single fatal result, by means of electrolysis.

By means of the electroleur, an instrument invented by Dr. Fort, the operation when properly done is innoxious, without pain or blood and no bougie is needed afterwards. Dr. Fort has been the first to apply linear electrolysis in cases of œsophageal obstruction. He related the remarkable case of a young girl having so narrow a constriction that she was unable to swallow anything beyond a few drops of liquid.

At the time she was at the point of death. A month afterwards the disease was cured, after 15 applications of the electroleur she was able to eat all kinds of food and her weight increased 25 lbs during that time.

The conclusions of the author are as follows:

1. Linear electrolysis may be used for all kinds of strictures.

2. Owing to the simplicity and harmlessness of the operation and owing to the greater infrequency of relapses by this than by other methods, we think that linear electrolysis should be preferred to urethrotomy and should constitute the operation "par excellence" in the treatment of stricture of the uretha.

3. Combined with dilatation linear electrolysis gives excellent results in the treatment of strictures of the œsophagus. It certainly benefits organic strictures and it cures almost immediately fibrous or cicatricial strictures provided that a small bougie be used to guide the electroleur.

MEDICAL ITEMS.

Dr. C. F. Hersman has been appointed Resident Physician at the Polyclinic.

Beaumont Medical College.—Dr. J. S. B. Alleyne, formerly Dean of the St. Louis Medical College, was on last Saturday night elected to the chair of Materia Medica, Therapeutics, Hygiene and Clinical Medicine of the Beaumont Hospital College.

Feeding in Gastric Cancer.—In gastric cancer with closure of either orifice, Jaccoud recommends the following as an enema: Bouillon, 8 oz., wine, 4 oz., the yelks of two eggs, and from one to five drachms of dry peptone. Mix.

To Clean Bronze Ware.—Fly specks, etc., may be removed from bronze by means of a mixture of lavendar oil, 1 dram; alcohol, 1 ounce; water, 1½ ounces. Use soft sponge and proceed quickly, with as little rubbing as possible.

The American Society of Microscopists, at its late meeting elected the following officers for the ensuing year: President, Dr. F. L. James, of St. Louis;

Vice-Presidents, Dr. M. D. Ewell, Chicago, and Professor E. W. Claypole; Secretary, Dr. W. H. Seaman, Washington, D. C.; Treasurer, Dr. C. C. Mellor, Pittsburgh, Pa.

Poison for Field Mice, etc.—The *Suddeutsche Apotheker Zeitung* gives the following: Amorphous phosphorus, 3 parts; best linseed meal, 150 parts; cheese curd, sufficient to make a pill mass. Divide into pellets of 15 grains, and roll in linseed meal.

Salipyrin.—This is a new drug now being prepared by J. D. Riedel's chemical works in Berlin, and is said to be a chemical combination of sodium salicylate and antipyrin. For some time past investigations concerning its usefulness and manner of action have been conducted in the various German hospitals.

Zinc in Neuralgia.—In the *Wiener Med. Woch.*, Dr. Nicholas Dubay reports a case of neuralgia of the abdomen, in which metallotherapy proved successful after all other remedies had failed. Dubay prescribed a zinc belt around the waist, and as improvement followed this, he ordered zinc internally in doses of one and one-half , with the result of complete recovery.

Cocaine Pencils.—A useful expedient for some of the minor ills of the cutaneous surface is the cocaine pencil. According to the *Brit. Med. Jour.*, this can be made by the addition of 2% of cocaine to the ordinary cocoa butter pencil, to be applied by rubbing over the irritated spot. To those who are susceptible to insect bites, or chafing, or other irritations of the skin, this remedy commonly affords almost instant relief.

The Bubonic Plague in Turkey.—The Imperial Sanitary Board of Turkey has information of an outbreak of the plague at Kale-Daragehan, a village of 280 inhabitants, and that 42 persons have been attacked, with 26 deaths already. The reporter of the cases, Dr. Constantinides, personally observed many of the patients. He states that the disease is marked by inguinal axillary and retro-auricular buboes, with a temperature of 104° F., and a bluish cutaneous rash.—*Br. Med. Jour.*

To Render Mosquito Nettings, Etc., Uninflammable.—Make a solution of 1 part of ammonium sulphate to 5 parts of water and immerse the netting in the same. One pound of netting will require from 20 to 24 ounces of the solution to thoroughly saturate it. The material is entirely inoffensive, and the ease with which it is employed is not its least recommendation. After saturating the bar (or other material) with the liquid it is necessary to pass a hot iron over the fabric to dry it and make it ready for use.—*Nat. Druggist.*

Blancoline, solid or liquid, is an approved base or vehicle for ointments, cerates, spraying solutions, etc. It is a product of petroleum, like vaseline and similar substances—with the pharmacopœial requirements for which it exactly coincides. The solid blancoline is like a pearl white petrolatum; the liquid is like a colorless paraffin oil; both are odorless and will, of course, not turn rancid. For medicinal, general pharmaceutical, and for toilet purposes blancoline is not excelled. The United States government, through its medical purveyor for the army, recently purchased 2,000 pounds of blancoline, preferring it to vaseline and other competitors.

Further Report on a Case of Cancer of the Breast Treated by Electricity.—The growth had been arrested for a year and eight months. The patient, æt. 38 years, was under treatment for three weeks in August and September, 1888; since then she had not required further treatment. The growth previously to the treatment had been rapid, involving three axillary glands, and causing marked retraction of the nipple. The stroma remained unabsorbed, and formed a complete skeleton of the growth.—Parsons in *Lancet.*

Death of Dr. Labatut.—Dr. Isadore Labatut, the oldest practitioner in the United States, died at New Orleans on August 2, in his 98th year. Dr. Labatut was a native of New Orleans, a member of one of the oldest and most respected creole families. He received his education at a French Medical College; graduating in 1813, he served in the French army as a surgeon in Napoleon's later campaigns, and was present at the battle of Waterloo. He came to New orleans in 1815, and practiced his profession there for 60 years. His health was perfect to within a few days of his death. The doctor leaves two brothers æt. 81 and 83. The fourth died last year, æt. 87.

A New Mixture for Use in Local Anæsthesia.—Dr. A. Dobisch, of Zwittau, has used, for the purpose of producing local anæsthesia, a spray, with Dr. Richardson's ether spray apparatus, composed of ten parts of chloroform, fifteen parts of sulphuric ether and one part of menthol. After one minute's application of this spray complete anæsthesia of the skin and neighboring tissues was obtained, which lasted for from two to six minutes, and sufficed for the performance of such minor operations as opening abscesses of the cervical glands, incising a deeply seated whitlow, and the excision of an epithelioma of the nose. In all the cases in which he employed the spray above mentioned the wounds healed satisfactorily.—*The Lancet.*

Surgical Wonders.—At the Surgical Congress at Berlin, Professor Gluck, of Berlin, gave an exhibition showing the successful substitution of catgut, ivory and bone, freed from chalk, for defects in bones, muscles, and nerve sinews. The juices of the body are sucked up in the inserted material, thereby establishing the junction of the separated ends, without any shortening

of the part. He presented the cases of patients in whom there had been an insertion of from six to ten centimeters of catgut to supply defects in the leaders of the hands, to which complete mobility had been restored. In the case of another patient Professor Gluck removed a tumor from the thigh, causing a defect in the bone. He inserted ivory and no shortening ensued. In another case he removed a large piece of nerve in the groin and inserted catgut, and the functions remained completely satisfactory.—*Alb. Med. An.*

Why She Occupied Two Seats.—A woman, who may have come from Perrysburg or somewhere, got on a street car yesterday at my corner. The car was full of passengers of her own sex, but there would have been a seat for her but for one woman, who persisted in sitting sideways and ignoring the presence of the passenger who was hanging on the strap. The newcomer looked long and earnestly at the one who was sitting sideways, then, stooping a little, said sympathetically.

"Got a boil, I reckon."

Although there were not many men present to snicker, the bell rang instanter, and one enraged feminine left the car.—*Toledo Blade.*

Injection of Ether in Neuralgias.—Dr. Kums, of Anvers, recommends the employment of subcutaneous injections of ether in the treatment of rebellious neuralgias, especially of a rheumatismal nature. The dose is 15 minims, and pure sulphuric ether may be used. Dr. Kums prefers a mixture of equal parts of alcohol and ether (Hoffman's anodyne). The injection should be as near as possible to the seat of pain. The doctor gives a large number of cases in which he has resorted to the remedy, embracing sciatica, cervico-brachial, cranial and facial neuralgia, torticollis, etc., and in almost every instance one injection sufficed to give almost instant relief. Some cases, however, required two, and a very few three, injections. The relief was most marked and certain in cases apparently linked with a pathological condition of the stomach and accompanied by gastralgic phenomena.—*Nat. Druggist.*

Thymol as an Intestinal Antiseptic.—The *Med. News*, in an editorial on "Intestinal Antiseptics,", speaks with special approval of thymol, naphthol and salicylate of bismuth. It says: "There is none better than the first-mentioned, which is perfectly innocuous in large doses and possesses an antiseptic power four times greater than that of carbolic acid. Its value as an antiseptic seems to have been more fully recognized in Italy than elsewhere, and has been endorsed by Martini, Bufalini, Testi and others. In our opinion it is, when properly administered and in suitable doses, *facile princeps* among intestinal antiseptics. Salicylate of bismuth is also an admirable remedy of this sort, and is the one most approved by Dujardin-Beaumetz in the article mentioned. He usually administers it in capsule in combination with magnesia, sodium bicarbonate, prepared chalk, phosphate of lime, beta naphthol or charcoal."—*Bost. Med. and Surg. Jour.*

Diet for Obesity.—

Meat.—Beef, mutton, grass-lamb, buck-venison, veal.

Game.—Fowls, chickens, pullets, turkey-poults, rabbits, leverets, plover, wheatears, wild chickens, pigeons, wood-pigeons, grouse.

Fish.—Dace, dory, cod, carp, brill, barbel, crabs, crayfish, flounders, haddock, ling, mackerel, lobsters, mullet, thornback, plaice, pike, soles, tench, gurnet, perch, dabs, prawns, whitings, trout.

Vegetables.—Kidney, windsor and scarlet beans; asparagus, cresses, vegetable marrow, artichokes, celery, endive, chervil, cabbage, cauliflowers, cucumbers, shallots, leeks, sea kale, lettuces, mushrooms, salsify, spinach, sorrel, radishes, turnips, salad, peas, tomatoes, onions, sprouts.

Fruits.—Apples, oranges, pineapples, currants, cherries, damsons, gooseberries, strawberries, raspberries, plums, peaches, nectarines, filberts—Davies' *Food for the Fat.*

Strychnine as the Antidote in all Cases of Alcoholism and Its Associate Diseases.—According to the writer, in cases of acute, subacute and chronic alcoholism, about a third of these cases being associated with delirium tremens, strychnine will supply every want. Nearly all suffer more or less from anorexia and are troubled with nausea. Some have come in, shaking from head to foot, miserable from loss of appetite, and, at times, wild with the delirium. These same unfortunate people leave a few days later freed from all such symptoms.

The usual plan of treatment was as follows: Upon admission 1-30 of a grain of the sulphate of strychnia was injected hypodermically, increasing the dose one-third every three days, until it was equal to a tenth. This being the maximum dose, it was given three times daily, though as much as a sixth of a grain has been given at once. As soon as the patient convalesced the same dose was continued by the mouth. There can be no fixed rule for this treatment. One should be guided by the symptoms that present themselves.—*N. O. Med. and Surg. Jour.*

Woman's School of Pharmacy.—The Louisville School of Pharmacy will begin its seventh annual session September 30. It is a pioneer in the work of educating women as chemists, and the only institution specially devoted to this work. It has an able corps of instructors, and a complete and well-equipped pharmaceutical and chemical laboratory. Its course of instruction is thorough. Its graduates rank high in their profession, and their services are sought for as assistants in first-class pharmacies and chemical laboratories. We are informed that there have been more applications for graduates during the past year than the total number licensed since the opening of the school. Its

regents and faculty give all the assistance in their power to earnest students in limited circumstances during their scholastic course, and in obtaining situations after graduation, and also the necessary pecuniary assistance to those who show an aptitude for and a desire to enter business on their own account. Full information and catalogues can be obtained of Dr. Wiley Rogers, Secretary of the State Board of Pharmacy of Kentucky, and Professor of Pharmacy in this institution, or Dr. J. P. Barnum, Dean.

While alluding to the police department, says the Chicago *Herald*, it might be well to recall a good story that is told on Lieut. Baus, an active and zealous officer, who has since been retired. When Baus was a petrolman he was always on the lookout for the commission of some horrible crime. He seemed to have a penchant for the murder line, and if he heard an unusual noise he was sure that it would be followed by some horrible discovery. One night, while patrolling his beat, with his ears wide open, he heard the screams of a woman, loud and many, in the upper story of a house near by. Baus thought that his chance had come at last, and that kind fate had destined him to be the rescuer and savior of some delicate female from a tragic end. Grasping his club firmly with one hand and getting his revolver ready for immediate use, like a chivalrous knight errant he broke into a double quick run and entered the house whence the unearthly shrieks were proceeding. He rushed upstairs, kicked open the door and there he saw two men bending over the prostrate form of a woman.

"You scoundrels," he shouted. "There must be a murder here."

One of the men turned around and when he saw the angry blue-coated minion of the law took in the whole situation. This man was the family doctor. He advanced to Baus, who was now beginning to see that he had made a mistake, and said: "Sh, officer. There is no murder here. We are simply preparing for an increase in this gentleman's family."

For a long time afterward this "murder" episode was a standing joke on the conscientious and loyal patrolman.

BOOK REVIEWS.

Annual of the Universal Medical Sciences. A Yearly Report of the Progress of the General Sanitary Sciences Throughout the World. Edited by Charles E. Sajous, M.D., and Seventy Associate Editors, assisted by over two hundred Corresponding Editors, Collaborators and Correspondents. Illustrated with Chromo Lithographs, Engravings and Maps. 1890. F. A. Davis, Publisher, Philadelphia and London.

As free and unrestricted as has been our praise of this valuable work in its previous edition, that praise could appropriately be applied to the present, 1890, issue.

Retaining the several improvements noted last year, the editor has not considered it without advantage to make additional changes, the most noticeable of which (and one, by the way, that meets with our hearty approval) is the creation of separate departments on subjects which have been considered under general heads. Under the editorship of Dr. J. Wm. White, syphilis is thus given an increased amount of space and attention, a survey of the progress in the treatment of which disease, as presented by this able author, will well repay the practitioner who is unable to keep track of the large amount of matter constantly appearing in the journals of this subject. In fact the same may be said of all of the departments. It is impossible for one, unless he have access to a complete exchange list, and is prepared to devote a large amount of time to it, to compass a year's literature, pertaining even to one branch of medicine; so that the value, in time as well as in money, of this work is readily apparent.

And when we remember that the editors of the several departments are gentlemen whose ability and reliability are universally known and acknowledged, we can appreciate the further advantage of having all this yearly literature sifted for us by competent hands—by those better able to judge, to accept or reject, than ourselves.

We notice that the space devoted to bacteriology, orthopædic surgery and the therapeutical application of hypnotism has been increased.

This work has come, not only to stay, but to march onward, in its own annual improvement as well as in the estimation of its patrons.

LITERARY NOTES.

Physiognomy and Expression. By Paolo Mantegazza, Senator; Director of the National Museum of Anthropology, Florence; President of the Italian Society of Anthropology. Two double numbers of "The Humboldt Library," price 30 cents each. The Humboldt Publishing Co., 28 Lafayette Place, New York.

Professor Mantegazza is the leading anthropologist of Italy, and his work has been already translated into several European languages. He has written a new chapter for the present edition, which contains his latest views on the subject, which he has made his own. Taking up the study of expression where it was left by Darwin, Prof. Mantegazza has treated the subject in a style that is at once popular and scientific. He has endeavored to distinguish observed facts from mere opinion or imagination, and he has given definiteness and coherence to the many new facts already collected.

The ancients, from Cleanthes up, believed that they could recognize dispositions from the looks. Lavater, who was a physician, a naturalist, and above all, an enthusiast, first gave something of a rational form to physiognomy. What the volume proposes is "to restore

to anthropology and to psychology that which belongs to it by right, and to make known the positive documents which we possess to-day on the human countenance and on expression."

THE QUINTESSENCE OF SOCIALISM. By Prof. A. Schaffle, former Minister of Finance in Austria. Translated from the Eighth German edition under the superintendence of Bernard Bosanquet, M.A., formerly Fellow of University College, Oxford. Paper, 15 cts. The Humboldt Publishing Co., 28 Lafayette Place, New York.

This number of "The Humboldt Library" is from the pen of one holding high rank among the economists of Germany as well as in the political councils of the Empire of the Hapsburgs. What we need at the present time is an accurate knowledge of what Socialism really is, for there is no gainsaying the fact that it is a mighty movement of ideas fast razing to the ground the old order of things.

Recent events in Germany give striking attestation of its stupendous power. If, therefore, we desire to get a thorough knowledge of the subject from a scientific standpoint we must read "The Quintessence of Socialism."

A NEW MAGAZINE. Published at the S. E. Corner Madison Street and Fifth Ave., Chicago, Ill. Sample copy, 10 cents.

"The Polytechnic" is the name of a new magazine to be published in Chicago, the initial number of which will be issued this month. Like the London Magazine of that name it will be the organ of a Polytechnic Institute, which in this case has been lately started in Chicago, and will be modelled after the famous London institute of similar name, an interesting account of which was given in the "Century" for June. The first number will be largely descriptive of the work of the Institute, especially its Trade Schools, a peculiar feature of which is that students may earn their expenses while in attendance, and can learn almost any trade. As this promises to solve the vexed apprenticeship question, all Master Associations are warm supporters of the movement. An article on the new Evening Medical College of Chicago is also included in this number. The ladies will be interested in the description of the Cooking, Millinery and Dressmaking schools of the Chicago Polytechnic Institute.

CORRESPONDENCE.

SULPHUROUS DISINFECTION.

The following letter, which is self-explanatory, forms a very interesting part of the discussion as to the efficacy of disinfection with sulphur fumes:

MICHIGAN STATE BOARD OF HEALTH,
Office of the Sec'y, LANSING, MICH., Aug. 23, 1890.

E. B. FRAZER, M.D., Secretary of the State Board of Health, Wilmington, Del.

DEAR DOCTOR:—Your letter of August 18, acknowledging the receipt of a copy of my letter to Dr. Duffield (giving results of experience of health officers in Michigan, and an account of experiments by Pasteur, Roux, Dujardin-Beaumetz and others relative to sulphurous disinfection) is before me. You ask me for further opinion, and refer to the report of the Maine State Board of Health for 1889, page 251, and to Dr. Prudden's estimate of the want of value of sulphurous disinfection (*Am. Jour. of the Med. Sci.*, May, 1890, page 470).

There are at least two valid objections to the acceptance of Dr. Prudden's conclusions to which you refer: (1) His experiments dealt with a micro-organism which seems to be different from the one most generally accepted as the probable cause of diphtheria. Therefore he may or may not have been dealing with a micro-organism causing diphtheria. (2) The quantity of sulphur burned—the strength of the sulphurous acid fumes which he employed—is not stated. It having been proved by actual experience with disease, and by other laboratory experimenters (Pasteur, Roux, Dujardin-Beaumetz, Vallin, Legouest, Polli, Pettenkofer, Dougall, Fabio, Pietra Santa) that sulphurous acid gas is not always a disinfectant when employed in small proportions, and that it is a disinfectant when employed in large proportions, such as result from the burning of three pounds of sulphur to each thousand cubic feet of air-space, no different conclusion should be reached from Dr. Prudden's experiments as published (*Amer. Jour. Med. Sci.*, May, 1890, p. 470).

You mention that Dr. W. H. Welch, of Baltimore, "enters his protest" against disinfection by sulphurous acid gas. I respectfully submit that entering a protest should count for very little in science as against results of actual, practical experience in the restriction of diphtheria; it should not even take rank with definite statements of results of laboratory experiments.

Laboratory experiments are very valuable, but they need to be repeated, by the same observer and by other observers, in order to eliminate errors due to accidental and incidental conditions.

It is not easy to make laboratory experiments which shall conform to or correctly represent average conditions in actual outbreaks of disease. That is probably one reason for the discrepancies in laboratory experiments, and for the disagreement of some laboratory experiments with practical experience with disease. One reason for this last disagreement may be that micro organisms which, after subjection to a disinfectant, may yet have sufficient vitality to reproduce in a laboratory where the most favorable conditions are supplied could not possibly do so in the human throat, or elsewhere in

the human body, because of the well-known power of the fluids of the body to destroy micro-organisms, as proved by Dr. Prudden's and other laboratory experiments following, but not confirming, Mebschnikoff's doctrine of the phagocytes.

Progress would be easier, more rapid, and the backward and forward movements less frequent, if experimenters in laboratories would be more careful in stating the details of their work.

The interpretation of the results of laboratory experiments, and the determination of the bearing which they should have upon practical affairs, is an extremely difficult work, and one in which there is great liability to error.

Practical health officers need to employ a gaseous disinfectant that shall at once reach all surfaces, ledges, cracks, drawers, and receptacles of dust, wherever it may be in a room, that shall permeate all articles sufficiently permeable to admit disease-causing micro-organisms, that will not necessitate too much labor in the removal of furniture and other articles, and that shall have power to destroy or sufficiently weaken the vitality of the "germs" of such diseases as diphtheria and scarlet fever, and occasionally small-pox, as they are usually distributed in the sick-room, and that shall not destroy the family portraits and similar articles. Only two such disinfectants are prominently before us for choice, chlorine and sulphurous acid gas. Of these two, sulphurous acid gas is made in proper quantity with more certainty and less trouble than is chlorine gas; and, at present, I regard the weight of evidence in its favor as equal to that relative to chlorine gas, concerning which not so much evidence has been published.

Practical experience in Michigan proves that by isolation of first cases of diphtheria, and disinfection of premises after death or recovery therefrom, by fumes of burning sulphur, etc., four-fifths of the cases and deaths which would otherwise occur from that disease are prevented. If there is any other method of disinfection or any other procedure that can be shown to reduce the cases and deaths more than four-fifths, and down to less than an average of two and one-third cases and six-tenths of one death to each outbreak, I am exceedingly desirous of knowing what it is. But inasmuch as that is the recent experience in Michigan (outside of the great cities), it does not seem best to give up the methods employed until evidence of a better method is produced.

Meantime I would advise a continuance of sulphurous disinfection, for the purposes for which it is applicable, and for which it is greatly needed, as stated above, not including the disinfection of excretions from the patient, for which chlorinated lime or liquid is applicable, nor of bits of diphtheritic membrane which should be destroyed by fire, as should also all rags and everything else not too valuable, used about a patient; and all clothing, bed clothes, etc., that can profitably be boiled should be so treated.

Very respectfully, HENRY B. BAKER.

FROM OUR SPECIAL CORRESPONDENT.

EUREKA SPRINGS, ARK., Aug. 25, 1890.

EDITOR REVIEW:—Your correspondent left St. Louis on the morning of July 28, for a sixty days' tour among the doctors of South-Western Missouri and North-Western Arkansas in the interest of the REVIEW. The first thing that specially attracted his attention was the greatly improved condition of the "Frisco" Railroad wrought by its sale to the "Santa Fe." With 500 miles of road bed in Missouri it is a singular fact that the "Frisco" has had a less number of accidents than any road in the entire country. For twenty years they have not had a single serious accident. Of all persons, doctors are most prone to search for causes. The only cause for this exceptionable immunity from the usual dangers incident to rapid transit is good management, supplemented by an excellent natural road bed.

The next thing especially noticeable was the number of invalids and others visiting Lebanon, a famous health resort some 180 miles from St. Louis on the "Frisco" Railroad. At this point a well 1,200 feet deep supplies a remarkably pure water, much sought after for its tonic and alterative effects.

An analysis by Prof. F. W. Clark, Chemist of the Interior Department, Washington, shows less than 11 grains of solids to the gallon. These are mostly carbonates of iron, calcium, sodium, magnesium, etc. Most excellent results from the use of these waters in the various neuroses, dyspepsias, and especially in rheumatism and genito-urinary diseases, are attested by many of the most prominent and trustworthy citizens of St. Louis, as well as elsewhere. Drs. McComb and Billings, and Dr. A. A. Tayman, all of whom are reputable and excellent physicians and have had ample opportunity to observe the effects of Lebanon water, assured me that they had witnessed many satisfactory results from its use in all of the diseases above mentioned. Lebanon water differs from all others in that it is not "ordinary surface water" and is wholly free from the usual surface contaminations. While medical books teem with recommendations and instructions to send patients to the famous Spa, Carlsbad, and other European springs, strange to say, physicians are by the laity everywhere charged with an unjust prejudice against medicinal springs and health resorts and for no other cause than that they discredit the Ponce De Leon vagaries and the fabulous, fruitless search for an "elixir of life," a "fountain of perpetual youth."

Surely in our own country there are medicinal waters of equal virtue with those of foreign lands, which have stood the test of ages, and whatever may be the final verdict concerning Lebanon water, one thing is quite apparent, and that is that capital, always timid, is now providing accommodations that heretofore did not exist for the thousands of invalids who may come in search of health from the waters as well as the high altitude and salubrious climate.

My trip thus far has led me to other observations,

chief among which is that of the popularity of the WEEKLY REVIEW. I observe among the doctors almost no demand for a monthly medical journal, unless it be one upon some special subject. The day for monthly journals seems to have gone by, and how soon they may demand a tri-weekly or a daily I cannot conjecture, but constantly I hear the complaint that medi cal items and news are stale, and they have lost interest when they reach them in a monthly. They say to me: "If an epidemic disease prevails in any part of the country it has abated ere we get a suggestion concerning it through a monthly journal." "If I am treating an acute case I search my weeklys for information and ere the monthly reaches me my case has terminated, favorably or otherwise."

The REVIEW, being the only weekly journal from the Mississippi to the Pacific Ocean, is justly prized wherever read. If you will indulge me in one friendlv suggestion I will offer this: give us a litle more of the practical, common, every-day information, and a little less of the rare, uncommon surgical exploits that no general practitioner will ever attempt, and probably no bold adventurer will ever repeat.

My communication is already too long (unless it were better). I did want to indulge in some personals that must be reserved for my next, in which also I hope to deduce some facts drawn from eight years of observation and experience concerning the medical properties of the famous Eureka Springs water as well as this locality for a health resort. J. W. L.

SOCIETY PROCEEDINGS.

TRANSACTIONS OF THE GYNÆCOLOGICAL SOCIETY OF CHICAGO.

Regular meeting, April 18, 1890. The President, James H. Etheridge, in the chair.

VAGINAL HYSTERECTOMY, WITH SPECIMEN.

DR. FRANKLIN H. MARTIN.—There is nothing of peculiar interest about my specimen; it is simply a case that I wish to put on record of vaginal hysterectomy for cancer of the cervix. I saw this case first about six weeks ago. The cervix, extending to the right of the vaginal junction, exhibited an ulcerated surface of a carcinomatous appearance. A specimen was removed at the time, examined, and pronounced carcinoma. At the same time the cervix was thoroughly scraped down to as near the healthy tissue as I could get. The patient was then left until I could hear from the microscopic examination, or until some signs of the disease should reappear. In about three weeks the old trouble returned. I watched it for some time, until it began to involve the vagina, and advised the operation of vaginal hysterectomy. Mrs. H., æt. 36 years, who had had one child and three miscarriages, was therefore operated upon in this manner January 15, 1890. The bases of the broad ligaments were ligated with silk, and for the remaining portion of each broad ligament a clamp forceps (Byford's pattern) was used. The operation was performed without difficulty or complications, and the patient was discharged in about four weeks. I have seen her within the last two or three days, and she is well.

NEPHRECTOMY, WITH SPECIMEN.

DR. HENRY T. BYFORD.—This is a suppurating kidney removed early. Patient, Mrs. S., æt. 31 years; married five years; no children. She has had periodic attacks of septic fever for over a year. The temperature would reach 103° to 104° F. during the attack, with great tenderness in the right side of abdomen. After a discharge of pus and granular material with the urine the symptoms would subside for a time. The organ was felt to be enlarged at each examination.

The kidney was removed through an incision made in the linea semilunaris, through which the other kidney was first palpated and found to be healthy. The tissues about the diseased one were healthy, but the uterine appendages were extensively diseased. I completed the operation by establishing drainage with iodoform gauze through a small opening in the lumbar region, and closing the abdominal incision completely. The ureter was ligated with fine silk at about one and one-half inches from the kidney, and placed so that any suppuration that might arise from it would find its way out through the lumbar opening. The temperature remained between 99° and 100° F. for a rew days, and then became normal.

(I.) PROBABLE SARCOMA UTERI; (II.) FIBROMA UTERI.

DR. H. T. BYFORD.—These two specimens may be shown together, as the history is not so important as the method of operating. One is probably a sarcoma, the other a fibroma of the uterus. One was removed yesterday, the other to-day. This patient with the sarcoma was somewhere near the menopause. She was rather thin, had a soft pulse, the menses were diminished in quantity, and the tumor was growing rapidly and causing pain. The blood vessels beside the uterus were exceedingly large, showing great activity and vitality. She had had this trouble for four years.

DR. DUDLEY.—Do you feel sure of the diagnosis of sarcoma?

DR. BYFORD.—Yes, I feel quite sure, but could not swear to it without an examination with the microscope. I base my diagnosis upon the appearance of the tumor when I came down upon it, the immense vascularity, the absence of a capsule (or, rather, the fusion of the capsule with the tumor), and the way the bladder was grown to it. The fact is, I left most of the muscular tissue of the bladder at the point of attachment on the tumor—the bladder seemed almost a part of it. However, I only got the specimen to-day, and shall be very glad to have the pathologist make an examination. There are certain clinical facts that make me feel quite certain that some tumors are sarcomata and others fibromata.

This other case is a small fibroid, and Dr. Jaggard will probably question the propriety of its removal. My reasons for removing it were the following: The patient was æt. 25 years; had been married eleven years. Ten years ago a prominent gynæcologist in New York diagnosed pelvic inflammation and pyo-salpinx, and treated her accordingly. I saw her a year ago, and found the appendages enlarged and adherent in the posterior part of the pelvis. I was not certain but that this tumor was merely the appendages or an old hæmatocele to which everything had been glued. She was so tympanitic that it was impossible for me to make a satisfactory bimanual examination. I operated more from a symptomatic standpoint. The patient had been taking a good deal of liquor and opiates lately, was excessively nervous, and expressed herself as losing ground.

Coming down upon the tumor, I saw, of course, what it was. I could not get at the appendages, so I lifted it out and found them adherent and inflamed. In getting them out the posterior surfaces of both ligaments were pretty well disorganized, and the right broad ligament was one connective-tissue cavity. I could not take them out and leave the parts in good condition, so I took the whole thing out.

This makes six cases on which I have operated in this way, all recovering. It is a method, I think, that has not been tried by any one else. The operation is simply this: The broad ligaments are tied off, the uterus amputated below the tumor, and the stump is sewed up somewhat after Schroeder's method, but with catgut and silkworm-gut stitches. The bladder is separated, an opening made down into the vagina in the anterior fornix just against the cervix. The silkworm-gut sutures, left long, are used for traction, and the cervix is drawn down and forward into the vagina and a clamp put on from the vagina. I have usually held the stump loosely with clamps, that the apposed surfaces might heal up somewhat, as after trachelorrhaphy. But as in all cases but the second one the edges sloughed, I now prefer ligating rapidly with silk and clamping firmly with my hollow clamp, so that the slough will separate early and come off in the clamp. The clamp prevents the contact of the slough with the patient's parts, and avoids septic trouble.

After I turn the stump down I sew the peritoneum from behind the bladder to the posterior wall of the cervix. There is no raw surface left for extensive adhesive inflammation in the pelvis, with its consequent peritonitis and obstruction of the bowels. I have used drainage above in all of these cases but one, because I do not usually operate on simple fibroids, there being generally some development in the broad ligament and some little oozing surface left. I do not drain below. When I put on the clamp from below I put a finger from above in the cul-de-sac of Douglas behind the cervix and a thumb in front of it, then push a pair of hæmostatic forceps up from the vagina through the fornix between my thumb and the cervix, and enlarge the rent by scissors-snipping and stretching.

Dr. C. T. Parkes.—I want to say a word or two about Dr. Byford's specimens. I hope the doctor will not think I am making any adverse criticism; I only desire to express my opinion, because it has been with me a very difficult matter to come anywhere near deciding the character of a tumor of this nature in the uterus, as to whether it is a simple myoma or whether it possesses some of the characteristics of the sarcoma. I think the usual characteristic of a sarcoma is that it does possess a capsule. I should consider the cavity in this tumor, from merely looking at it, as a simple degeneration of myomatous tissue from want of nourishment.

I think the kidney specimen is very interesting, and unusual in the fact that a suppurating kidney should have existed this length of time without any further increase in size and without following the usual disposition of these troubles towards external manifestation of suppuration. The only explanation that appears in this case is the fact of the peculiar enlargement of the ureter, which enabled it to discharge the accumulated matter in the pelvis of the kidney into the bladder. Usually in suppurating kidney almost the first manifestation we have is the formation of a tumor and the development of a perinephritic abscess which opens externally. Surgeons have always found difficulty in the treatment of these cases, on account of the presence of cicatricial tissue formed in the surrounding tissues, preventing the easy removal of the organ. So far as the general surgery is concerned, it is almost a rule that suppurating kidneys should not be removed, and this rule is sustained by the results in many cases. But this case is very fortunate in the fact that it had no surrounding complications; all the trouble was inside the kidney and could be attacked without any such difficulties as usually arise. It is an interesting subject to me, because I have had quite a number of these cases of suppurating kidney in which the trouble had gone on to perforation of the capsule of the kidney and the formation of a perinephritic abscess and degeneration of the tissues about it; but I have always dreaded to remove them, on account of the complications arising from the presence of adhesions and the danger of septic trouble, but have adopted the plan of laying them widely open, which is not very satisfactory, as the patient goes on to apparent recovery, but will return again owing to the many pockets in which pus accumulated. The question is, What is the best procedure? It is a serious matter to remove a kidney, especially a suppurating one. The other kidney does not always perform its function, for a time at least. The idea of continuous irrigation has suggested itself to me in these cases. Whether it can be put in force and applied as in other cavities is a question I should like to see settled some time.

Dr. Martin.—I had the pleasure of witnessing a couple of these operations by Dr. Byford with this method of treating the stump, and it seems to me that it is of sufficient interest to at least receive comment and commendation. The only objection that I can

offer to the operation performed by Dr. Byford is that for a nervous, rapid operator the procedure is altogether too long. Dr. Byford spends from two and a half to three hours in performing this operation, and while the abdominal cavity is perfect after the stump is secured, and it is a case that you will pronounce a success almost from the beginning, at the same time it is very tedious, and a great many operators, even good ones, would object to doing it on that account. It seems to me that this method of treating the pedicle is an advantage over the fixation of the stump in the abdominal wall by means of clamps, inasmuch as it does not interfere in the slightest with the bladder, and it does not afterwards leave an ugly, depressed cicatrix. That point is certainly of value, especially the pressure upon the bladder. When the stump is turned down, there seems to be no more pressure upon the bladder than if the cervix had been amputated at the internal os and left projecting into the abdominal cavity.

Dr. W. W. Jaggard.—Dr. Byford alludes to a criticism I felt called upon to make some evenings ago when he presented a uterus removed by vaginal hysterectomy. The operation was well done, and was a success in so far as the patient recovered. The criticism I made was that there was absolutely no reason for the removal of that uterus. There were two or three small foci of myomatous tissue, not one of them bigger than the terminal phalanx of your little finger. As I remember, the alleged indication for the operation was the fear, first, that these foci might undergo malignant change, and, second, dysmenorrhœa. But the woman was very near the menopause—æt. 45 years, I think. The other point in the indication was the fear that this myomatous tissue would undergo a malignant change. Such a case ought not to go on record without some vigorous protest.

Dr. Byford.—I would like to say a word with regard to Dr. Martin's remarks. I think he extends the time a little from what it usually takes. The reason why it has taken so long in most cases is because it is a new procedure; I hardly knew in my case when I started that I was going to finish by this method. Ligation and clamping of the stump will save much time in the future. Another thing is the complications; I was one time half an hour getting this tumor out on account of adhesions below.

In regard to the capsule, I did not mean to say that sarcomata have no capsule; I mean that their capsules are adherent, and cannot usually be separated from the tumor without excessive hæmorrhage.

As to the kidney, of course I understand the danger of removing a suppurating kidney. My operation was exploratory at first. I opened into the abdominal cavity, examined the other kidney and found it normal in shape, size and surroundings. I think it is what we ought to do with all suppurating kidneys—remove them before the pus has penetrated the capsule. This patient has no constitutional symptoms of tuberculosis, nor any trouble that would denote general infection from any disease.

In regard to the case Dr. Jaggard referred to, I would state that I can hardly agree with him as to the size or condition of the largest of the myomatous masses.

[TO BE CONTINUED.]

SOCIETY NEWS.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

The Mississippi Valley Medical Association will hold its 16th annual session at Louisville, Ky., October 8, 9 and 10, 1890. Cincinnati leads the list in papers to be read. Her best men in great numbers have come forward with papers and a great many who will not read will attend. Among the prominent names already on the programme are: Reamy, Whittaker, Ransohoff, Ryan, Ricketts, Comegys, Thrasher, Tenner, Cincinnati; Baker, Corlett, Vance, Scott, Cleveland; Daly, Sutton, Murdoch, Wood, Pittsburgh; Dunning, Indianapolis; Walker, Evansville; Nollister, Lydston, Belfield, Chicago; Love, Mudd, Dumesnil, St. Louis; Geiger, St. Joe: King, Kansas City; Wile, Danbury, Conn.; Wyeth, New York; Woodbury and Hare, Philadelphia. Among the subjects are, Fatal Vomiting after Laparotomy, Ectopic Pregnancy, Tracheotomy, Cystitis, Stricture, Helps and Hindrances to Medical Progress, Neurasthenia, Alcoholism, Rhinoplasma, Antiseptic Treatment of Dyspepsia, Torsion of Arteries as a Means of Arresting Hæmorrhage, One Danger that Threatens the Physical Deteroration of the Whites in America, The Relation of Cough to Intra Nasal Disease, Intra-Uterine Treatment, Original Investigation in Medicine in the United States, Treatment of Epilepsy, Construction of Bacteria, Alcoholism, Myopia. The programme is a good one, already fifty-five titles being presented, including the leaders of Medicine in the Mississippi Valley and covering the field of Gynæcology, Medicine, Surgery, Laryngology and Ophthalmology. The social arrangements are on an immense scale and promise to make a visit to Louisville most enjoyable. The order of the Association is to supplicate science by day, and solicit solace in society by night. The meetings are strictly business—no time for quarrels. The officers of the Association are, President, Dr. Joseph M. Mathews, Louisville; Secretary, Dr. E. S. McKee; Chairman Committee of Arrangements, Dr. I. N. Bloom, Louisville, to whom gentlemen may write on business coming under their respective departments. The American Rhinological Association will meet at the same place the same week.

MEDICAL SOCIETY OF THE MISSOURI VALLEY.

The Medical Society of the Missouri Valley holds its next annual meeting at Council Bluffs, Iowa, September 18 and 19, 1890.

Please forward titles of papers to the Secretary at once.

It is to be hoped that every member will interest himself in the coming meeting.

James Carter, Secretary,
Red Oak, Iowa.

ORIGINAL ARTICLES.

SUPPURATING ULCER OF THE CORNEA.

BY EDWARD JACKSON, A.M., M.D.,

Professor of Diseases of the Eye in the Philadelphia Polyclinic.

Read before the Medical Society of the State of Pennsylvania.

For the present purpose it is convenient to regard corneal ulcers as divided into two classes, the simple and the suppurating.

In the former the loss of substance constituting the ulcer is surrounded by clear, apparently normal corneal tissue, or by tissue moderately infiltrated with plastic material; in the latter the surrounding tissue is, to some extent, softened and infiltrated with pus.

The simple ulcers include those ordinarily seen in neuro-paralytic, malarial, or phlyctenular keratitis, and many of those due to injury of the cornea, or accompanying catarrhal forms of conjunctivitis. The suppurating ulcers arise from infection, sometimes from primary infection either on the surface, constituting an ulcer from the start, sometimes from deeper infection, starting as corneal abscess. Certain injuries are particularly prone to give rise to suppurating ulcers.

The simple ulcer, too, is quite liable to become infected, and pass over into the suppurating class. While, on the other hand, it is the endeavor of the surgeon by appropriate treatment to deprive the suppurating ulcer of its peculiar character and carry it over into the class of the simple.

The majority of ulcers that perforate the cornea belong to the class we are considering, and a very large proportion of suppurating ulcers, unless checked by appropriate treatment, go on to perforation of the cornea.

The management of one of these cases, so long as it maintains its special suppurative character, is always a cause of anxiety and annoyance to the surgeon. For not only is there danger of perforation leaving adherent leucoma and permanent opacity of the cornea, but in a considerable proportion of cases the pus makes its way into deeper parts of the cornea, causing onyx or hypopyon, and the suppurative process extending still further is liable to cause the complete functional destruction of the eye.

In this form of ulcer the general disturbance of the whole eyeball is usually considerable, the pain severe, the hyperæmia marked. But the diagnosis is to be made principally by inspection of the ulcer itself. Plastic exudation into the cornea, and chronic opacities of the cornea are gray. Purulent opacity is yellowish. Sometimes fine vessels give to other opacities a somewhat yellow color, but in such cases careful examination under a strong lens will reveal the individual vessels. In addition to the yellow color it presents, the tissue involved in the suppurative process is greatly softened.

Passing directly from the practical matter of diagnosis to the practical matter of treatment, the gravity of this affection has, with reason, been held to justify recourse to vigorous measures of treatment. In the more serious cases, especially the so-called *ulcus serpens*, incision extending through all the layers of the cornea and from the sound tissue on one side to the sound tissue on the other, was a few years ago the accepted standard treatment. Milder cases were to be met by a vigorous scraping away of the surface of the ulcer. More recently the actual cautery or the galvano-cautery, for the destruction by heat of the infected tissue, has been quite generally resorted to with good results. And it is the treatment to which I should resort if the following method had not given even better results, as to the amount of permanent opacity left by the disease.

The surface of the ulcer is to be carefully scraped with a blunt instrument, such as the corneal spud, until all tissue soft enough to be readily scraped away has been so removed, and the purulent exudate has been squeezed out of the tissue around it. This manipulation reveals the real depth of the ulcer, considerably narrows the area of noticeable infiltration, and enables the surgeon to make his subsequent application directly to the seat of conflict between the living tissue, and the invading pyogenic bacteria. The scraping should be repeated whenever any renewed extension of the area of purulent infiltration is noticeable, whether that be in six, twelve, or twenty-four hours, and so often as there is this indication for it.

Immediately after each scraping the surface of the ulcer is to be thoroughly washed with a solution of bichloride of mercury of from 1:000 to 1:3000. This is done by filling the ordinary rubber-bulb pipette or dropper with the solution, holding its nozzle in close proximity to the ulcer, and then ejecting the fluid with considerable force against its surface.

In addition, the patient is to have the eye thoroughly cleansed every one, two, or three hours with a solution of mercuric chloride of 1:3000 or 1:5000. And two or three times a day the closed lids are to be bathed, for five minutes or longer, with water as hot as the patient can bear. The length of the hot-water applications is to be proportioned inversely to the inflammatory hyperæmia. When the general inflammatory reaction seems greatly below what should attend the suppurative process going on in the cornea, each application of hot water may be continued fifteen or twenty minutes, and the application may be more frequently repeated.

The pain of this scraping and washing may be brought within reasonable limits by the use of cocaine. When corneal abscess is to be dealt with, it is to be opened freely, and at once; and then treated as a suppurating ulcer. The eyes should be kept at rest for some days, and perhaps shaded during this time; and anything like poulticing or bandaging carefully avoided. As the ulcer loses its special suppurative character, this

special line of treatment may be abandoned, except that the use of the milder solution of mercuric chloride should not be given up until the healing is pretty well completed.

The line of treatment thus indicated is essentially the one I have followed for a little over two and a half years. The results obtained with it have been very satisfactory. Of the eighteen cases of suppurating ulcer that have during that period been under my care, but three have gone on to perforation of the cornea, and these three are exceptions that may truly be said to prove the rule, since they were not at the time the perforation occurred under this treatment.

Case I.—S. H. M., a colored boy, æt. 9 years, was brought to the clinic with an ulcer near the outer margin of the right cornea; this was regarded as a phlyctenular ulcer, and so treated. He neglected to return until the fourth day when the ulcer had perforated, allowing a small round prolapse of the iris. The margins of the ulcer presented purulent infiltration. They were treated by the above method and quickly healed. Eserine failed to reduce the prolapse, which was snipped off three weeks later. The eye was left with a small peripheral adherent leucoma, a free circular pupil and good vision.

Case II.—A girl, æt. 3½ years, was brought with a central suppurating ulcer of the cornea, which was treated according to the plan recommended. Next day there was great improvement. Two weeks later she was brought back with the ulcer greatly extended and its floor and sides a mass of sloughing tissue. The history given was that after the second visit it seemed so nearly well that the mother thought it not worth while to return, and in two or three days discontinued the use of the bichloride solution at home. It had been getting worse again for nearly a week. On attempting to fix the eye for the scraping, the floor of the ulcer gave way, and the aqueous humor escaped with a spurt. The treatment was now regularly pursued, and the ulcer healed rapidly, leaving no synechia, but a central leucoma preventing any good vision.

Case III.—A child æt. 3 years. Brought to the clinic in my absence and treated as a case of phlyctenular ulcer without scraping or bichloride. At the second visit the floor of the ulcer was found sloughy, and it readily perforated during the scraping. Recovery was prompt, with a small leucoma and one thread-like synechia.

It will be noted that in two of these cases perforation occurred at the time of the scraping, but it cannot be blamed on the special instrument or manipulation employed. It would be quite as likely to follow any other local manipulation and treatment. Possibly in some such cases it may be avoided by a previous tapping of the anterior chamber through some other part of the cornea, a procedure I resorted to with success in one of the cases treated after this plan.

REPORT ON PROGRESS.

SURGERY.

Barnes' Bag in Intussusception.

Rivington, of London (*Brit. Med. Jour.*), has twice employed Barnes' bag in the treatment of intussusception. The first case was that of a man who had a slight constriction of the rectum, through which a portion of the gut had descended, producing an intussusception which could be felt per rectum. Upon the introduction and inflation of the bag, the portion of gut receded and remained permanently up. The second case was a child, æt. 7 months, with a history of vomiting and the passage of bloody stools for two weeks. A prolapse of the bowel existed, the apex of the tumor being the ileo-cæcal valve. A partial reduction was easily effected, but both insufflation and the injection of fluid failed to secure a complete reduction. A Barnes' bag was introduced, simply with the idea of retaining the mass. It was removed twice daily to allow the escape of fæcal matter. At the end of two days, nothing further having been used, the intussusception had completely disappeared. Whether the reduction was caused by increased peristalsis in the efforts of the bowel to rid itself of the bag, or by an accumulation of gas above the bag, seems uncertain. The author suggests that this means of treatment will prove a valuable aid in those cases in which the intussusception shows a tendency to recurrence on replacement, and in those cases in which the tumor can only be partly reduced by injections of air or liquids.

A New Operation for Prolapse of the Rectum.

In an article in the *Lancet*, Brigadier-Surgeon K. McLeod, after referring to the unsatisfactory result of scarification and excision of portions of the mucous membrane in severe cases of prolapse of the rectum, reports the following case and a new method of treatment which he used. The patient was a Hindu youth, æt. 19 years, who had been afflicted with prolapsus recti for eight years. The protrusion occurred with every motion from the bowel, but the patient could reduce it, with much difficulty. On admission to the hospital, the tumor measured six inches in length and eleven inches in circumference. The sphincter was quite devoid of tone, and the mucous membrane covering the tumor was much congested and bled easily. The mass could be reduced with some difficulty, and while the patient lay in bed, would remain till an evacuation of bowels occurred, when the prolapse again took place. After a few days' treatment with mild laxatives he was put under chloroform, and, the surface of the extroverted rectum having been washed and carefully dried, the mucous membrane was cauterized by the red-hot iron in the usual way. For ten days after this operation the condition was much improved, as only a slight protrusion

occurred with each stool, and this disappeared of itself after the passage was completed.

But after this time the prolapse again became almost as large as at first, and the reduction was made very difficult by the painful ulcers left by the separation of the eschars made by the cautery. Amputation was considered, but was rejected in favor of the following procedure, which possessed the advantages of being much less severe, and still leaving amputation as a last resort in case of its failure.

The patient, whose bowel had been thoroughly cleared out and washed with antiseptic lotions, was anæsthetized, and the well oiled hand passed through the rectum and into the sigmoid flexure. The fingers, pressing out the parietes above Poupart's ligament, could be easily felt, as the walls of belly were very thin. As carefully as possible, the small intestine was shoved over to the inner side of the hand in the bowel. A long steel needle was now passed through the abdominal wall into the gut, guided across its cavity by the hand inside it, and finally again brought out through the wall of abdomen at a point 3 inches from its site of entry. Another needle was passed in the same manner 3 inches above first, so that the bowel was pinned to the wall in an oblique position, from below upward and outward. The hand was now removed from bowel and an incision made between the needles, at right angles to them, which divided the abdominal wall down to the peritoneum.

The hand being again introduced, two rows of silk sutures were placed, passing through the parietal peritoneum, and through the peritoneal and muscular coats of bowel, being guided in this latter position by the hand inside the bowel. The wound in the abdominal wall was then closed, and the whole covered with antiseptic dressing. The pins were removed after 24 hours. The wound healed well.

On the eighth day, as he had had no stool, the rectum was examined and found full of fæces, which were removed by scoop and an injection. Patient did well, the only alarming symptom being a rise in temperature, with tympanites, on the ninth day. The bowels were moved at intervals by enemata, and on the twenty-fifth day, a dose of oil having been given, he had a large stool without any tendency to prolapse.

Patient was now allowed to get up. He passed stools naturally and left hospital forty-two days after the operation, up to which time there was no sign of any tendency to prolapse.

The author is unable to claim that the cure will be permanent, and, of course, there may be cases in which the treatment would not be applicable. The operation would seem worthy of trial in suitable cases, even though it may not be a radical cure.

The Injection Test in Cases of Supposed Rupture of the Bladder.

Dr. Walsham (*Lancet*) reports the following case, illustrative of the value of the injection test in cases of supposed rupture of the bladder. The patient was an old woman who had been run over by a van, one of the wheels passing over the lower portion of her abdomen. On admission to the Metropolitan Hospital, she was found to have sustained a fracture of pelvis involving the sacro-iliac joint, with considerable separation of symphysis pubis. She was extremely collapsed. She complained of much pain in lower portion of her abdomen. She could give no idea of how much urine she had in bladder at the time of the accident. A silver male catheter was passed, but only a small quantity of blood-stained fluid escaped, and on lowering the handles it seemed that the point of the instrument could be felt through the abdominal walls with unusual distinctness. These symptoms caused a suspicion of a rupture of the bladder, and an opening above pubes was about to be made when it was decided, first, to try the injection test. A measured quantity of water was accordingly forcibly injected into bladder, and after a few minutes allowed to return, when the amount was found to be approximately what had been injected. This led to a deferrence of the operation, and in the course of the evening the patient voided urine naturally. After this she had no more trouble with bladder, and made a good recovery.

Iodoform in Tubercular Diseases of Joints.

Bruns states (*La Mercredi Med.—N. Y. Med. Jour.*) that the reason for the ill success in the use of iodoform in the treatment of tubercular ulcerations is that the iodoform is washed away by the secretions and thus does not come into prolonged contact with the diseased areas. In old abscesses this difficulty is overcome by the injection of solutions of iodoform. The contraction of the abscess cavity is slow, occupying as long as four months. Olive oil is the proper vehicle for the administration of the iodoform. Twelve large abscesses were so treated with complete recovery.

In the treatment of tubercular arthritis, if the disease be in its fungous stage, interstitial injections of 4 to 6 cubic centimeters of a mixture containing 10 to 20 parts of iodoform should be used. If there are peri or intra-articular abscesses, these should be evacuated and their cavities injected. Immobilization is not usually required. These injections should, as a rule, be repeated every two to four weeks. As a result the pain is soon lessened and the purulent secretions, though at first reproduced, are ultimately absorbed. The fungosity gradually disappears, and the joint retains its usefulness and mobility.

Among the reported cases are affections of practically all the articulations, but the treatment seems to be least successful in cases of hip joint disease. Trendelenberg has used this treatment in 130 cases, the injections being repeated at intervals of eight days. The results varied. They were good in the hip and wrist.

Landmarks for Reaching the Temporal Lobes in Suspected Abscess of the Brain.

In a paper read before the Royal Academy of Medicine in Ireland (*Dublin Jour. Med. Sci.*), Mr. Thornley Stoker reports a case of trephining for abscess of brain secondary to disease of ear. Pain, retraction of head and right anosmia were the principal brain symptoms. It was not considered clear from these symptoms whether the temporal lobe or the cerebellum was the seat of disease. The trephine opening was planned with the view of exploring the cerebellum in case no le sion of temporal lobe was found. The opening was placed with its center one inch and a quarter behind the external meatus and one inch and one-half above this base. Nine exploratory punctures were made and on the ninth pus to the amount of two or three drachms was found at a distance of 1½ inches from the surface.

Three months after the operation the patient was doing well, the sense of smell being restored and all other symptoms relieved. Mr. Stokes showed that, if the measurements of Barker were followed, which place the center of the opening 1¼ inches above line of meatus, there would be great danger of exposing lateral sinus, while only the inferior temporal lobe would be reached. He thinks it would be better to place the center of trephine 1¾ inches above this line.

Partial Resection of the Liver.

Dr. Vohtz reports (*Med. Rec.*) this case:

A woman, æt. 21 years, had noticed a tumor in her abdomen for over nine years. This had rapidly increased in size after a confinement 11 months before. On examination a round, smooth, tensely fluctuating tumor was found, which extended below a line drawn between the two iliac spines. It could not be separated from the liver, but on account of its great mobility in other directions, it was thought to be an omental tumor. A laparotomy was made and the tumor was then found to be an echinococcus occupying the lower and posterior portion of the liver. It was excised together with a part of the liver. The wound in the liver, which did not bleed much, was united by a continuous suture and the abnominal wound closed. Recovery was uninter rupted.

TRANSLATIONS.

FROM THE FRENCH AND GERMAN.

BY F. NEUHOFF, M.D., ST. LOUIS.

Lactic Acid in Diarrhœa.

Hayem has on a former occasion communicated his success in the treatment of the diarrhœa of children by lactic acid. Having now employed the remedy in adults, the author has again obtained only good results. While the local use of lactic acid in tuberculosis is well known, its internal use is scarcely mentioned in books on therapeutics.

Only traces of it are found in the stomach during the digestion of bread. It is more abundant during the digestion of meat and milk. It is altogether absent when the contents of the stomach are very rich in hydrochloric acid. Its role in digestion is not well understood. In small doses it is anti-dyspeptic and anti-fermentative, but its action is more feeble than that of hydrochloric acid and it does not affect the same germs. It is absorbed in the stomach and intestine under the form of lactates which are decomposed in the blood and transformed into alkaline carbonates; the urine thus becoming alkaline.

When taken in large doses, however, a part passes into the urine unchanged; it is also found in the stools in diarrhœa. It is therefore able to have a local and germicidal action in the intestinal tract.

Hayem has never witnessed a digestive trouble, such as eructations, vomiting, diarrhœa or emaciation, resulting from the administration of lactic acid.

The experience of Heiss has successfully overthrown the theory of Heitzmann as to the role of lactic acid in the production of osteomalacia.

The following formula for the use of lactic acid is recommended:

℞ Acid, lactic,	grammes,	10–15	(ʒij–ʒiijss, grs.xv.)
Syrup,	"	200	(℥vj ʒij.)
Aquæ,	"	800	(℥xxv.)

M. S.: Drink in the interval between meals.

Lactic acid acts very well in the diarrhœa of typhoid. It is less efficacious in enterocolitis. It effected a rapid cure in many patients suffering from chronic diarrhœa, and having a gastric juice of less than normal acidity. Three cases of cholera nostras were also rapidly cured by the use of this drug.

Hayem recommends it in epidemic cholera as both a curative and a prophylactic agent. Four to six grammes is the dose for the latter and ten to twenty for the former purpose.—*L'Union Med.*

Solution of Quinine Without Bitterness.

℞ Quiniæ sulph.,	gr. viij (0.50).
Acid sulph. dil.,	♏viij (0.50).
Essence menth. piper.,	gtt. v (5 gtt).
Sol. saturat. sacharine,	ʒijss (10.)
Aquæ destil.,	℥ij–ʒvj (90.)

—*Jour. de Med. de Paris.*

Laxative Electuary for Children.

℞ Mannæ,	parts,	50.
Magnesiæ calcin.,	"	10.
Sulphur. sublimat.,	"	10.
Mel. despum.,	"	30.

M. S.: One or two tablespoonfuls in a cup of tea or hot milk.—*Le Bul. Med.*

Absorption of Drugs by the Trachea.

Convinced by experiments on animals, that it is possible, without deleterious results or even without any inconvenience whatever, to inject small amounts of fluid into the trachea, Dr. Botey made the following experiment on himself: He first anæsthetized his larynx with cocaine, and then injected into his trachea 10 cc. (ʒijss) of distilled water. No harm resulting, double the amount was injected on the following day. Again no inconvenience was experienced, but the number of respirations fell from 21 to 17 per minute, and the pulse fell from 82 to 74. A few days later the doctor increased the amount of injected fluid to 50 cc. (ʒjss) and still experienced no unpleasant or injurious effects.

Having a patient suffering from laryngo-tracheal syphilis which proved very rebellious to energetic internal medication, Botey determined to treat it by injections into the trachea.

On the first day he injected 12 cc. (ʒiij) of a 1% iodine solution. As no cocaine had been used, some cough resulted.

The next day, after the preliminary use of cocaine, 15 cc. (ʒiijss, ♏x) of the same solution were injected. Some days later 25 cc. of water containing 0.25 (nearly 4 grains) of iodine and 0.002 ($^1/_{32}$ grain) of bichloride of mercury injected. No inconvenience resulted in either case.

These injections were repeated 17 times. They were well borne by the patient, and cured the disease.—*Le Bul. Med.*

Large Doses of Acetate of Ammonium in Scarlatina.

Mr. Vidal says: Children bear very well acetate of ammonium in doses of one gramme (15 grains) for each year of age. To adults the drug should be given in 35 gramme (ʒj, grs. xlv) doses.

It is probable that acetate of ammonium in the above doses by lowering high temperatures constitutes a valuable remedy in scarlatina and perhaps also in other eruptive fevers.

The efficacy of this drug appears to us more rapid in proportion as it is administered at a time nearer to the beginning of the disease.—*Le Tribune Med.*

Bacillus of Koch as an Element in the Diagnosis of Tuberculosis of the Larynx.

Dr. Ricardo Botey (*Revue de Laryngol.*) has arrived at the following conclusions:

1. The presence of the bacillus of Koch in the secretions of the larynx does not necessarily indicate tuberculosis of this organ, for it may come from tubercular disease of the lung.

2. The absence of the bacillus in the secretions does not prove the absence of tuberculosis of the larynx in a doubtful case.

3. One almost never finds the bacillus in a tubercular larynx when grave pulmonary lesions do not exist besides; although one almost always finds the microbe in the sputum coming from the lung of phthisical patients.

4. The bacillus of Koch is therefore a very feeble resource as an element in the diagnosis of chronic phthisis of the larynx, and can probably be of use only in acute miliary tuberculosis of the throat and larynx.—*L'Union Med.*

Simple Remedy for Thrush and Sordes.—A very simple and efficacious remedy for thrush and sordes was suggested by Mr. W. Theophilus Ord, of Bournemouth, England, in the *Lancet* last year. He says the following lotion, applied frequently with a feather or brush to the white patches, kills the oidium albicans more quickly than any other he knows, and removes the patches after a few applications, leaving healthy mucous membrane. It consists of equal parts of black wash and glycerine mixed. The quantity used is so small as to be quite harmless. Another condition in which he has found the same lotion valuable is that of sordes on the teeth, lips and tongue in many cases of enteric fever. It cleans these parts as if by magic, and renders that unpleasant process known as "scraping the tongue" quite unnecessary. It may also with advantage be painted over the fauces in unhealthy conditions of the throat common in typhoid. He tried it in one case of catarrhal stomatitis, but it had no effect, whereas chlorate of potash effected an immediate cure. Also in the sordes of advanced phthisis it seemed to be of no use. Part of the beneficial influence of the application is, no doubt, attributable to the glycerine.—*Med. and Surg. Rep.*

The Action of Gelsemium in Some Local Spasms and Neuralgias.—This article is chiefly interesting because of the large amount of the drug taken. Well marked physiological but no toxic effects were produced.

The patient was a woman in whom a clonic spasm of the muscles supplied by the spinal accessory nerve followed a fall from a wagon.

For three weeks, from Jan. 31 to Feb. 21, this patient took for the greater part of the time 26 drops or thirteen minims every two hours night and day. For another part of this time, alternately, either thirteen minims, or seven and a half minims every two hours, or about this amount. For the remaining forty-seven days she took about thirteen minims eight times daily. The average taken daily, when the maximum amount was administered, was about one hundred and fifty-six minims. During three weeks, from Jan. 31 to Feb. 21, she probably took between five and six ounces, and during the last forty-seven days in all 4,888 minims, equal to eighty-one ounces.

Very marked improvement but no complete cure resulted.—*Jour. Nerv. and Ment. Disease.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

Communications relating to subscriptions and advertisements should be addressed to J. H. CHAMBERS, 914 Locust Street.

Original Articles, Reports of Cases, Correspondence, etc., relating to interesting medical topics, are cordially invited.

Twenty-five extra copies will be furnished free to the author of each original article.

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Contributors desiring reprints can obtain them on favorable terms by applying to the publisher immediately after their articles have been accepted for publication.

Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, SEPTEMBER 13, 1890.

A. WILFORD HALL, PH.D., LL.D.

This is the name of a most unprincipled New York quack, whose agents appear to be swarming over the length and breadth of the country. Hall has a "hygienic discovery and treatment for health and longevity," original with him, which appears to be one of the most marvellous things ever revealed to man. He is willing to impart this precious secret to his suffering fellow mortals for the trifling sum of four dollars, accompanied by a pledge not to reveal the method of treatment to anyone. Those who have invested in his health pamphlet say that his wonderful discovery consists in getting a family syringe, and daily squirting hot water into the rectum. This simple procedure will not only render man invulnerable to disease, but will also preserve him in perfect health until the human machine has worn out, long after the allotted three-score and ten, according to Hall's representations. By means of this he was enabled to cure himself when in the last stages of pulmonary consumption. He has also placed the "philosophy of substantialism" on a firm basis. In addition to this he has christened himself the iconoclast, from the facility with which he has knocked from their pedestals Darwin, Tyndall, Huxley, Haeckel, Helmholtz and a host of others, their most cherished theories falling like tenpins before an expert bowler. The undulating theory of light, sound, etc., have all been proven false, and the forces of nature, gravity, heat, electricity, etc., have been shown to be substances more real than matter itself.

These astounding revelations, however, are of little moment compared with the story of his wonderful health preservative, and here it is that we fail to find language adequate to the expression of our feelings. His agents, not content with going among the laity, have the unparalled effrontery to visit members of the medical profession, endeavoring to secure victims by means of this shallow dodge. A representative of the REVIEW was visited by one of Hall's emissaries last week, who gave her name as Mrs. S. S. J. Lanphear, M. D., address 2914 Laclede Ave., this city, and it is from this source that we obtained the news of Dr. Hall's later discoveries, which have apparently ri en the scientific world to its core.

Dr. Lanphear is a gaunt, elderly female, possessed of a most remarkable flow of words; for speed and endurance she outclasses any book agent we ever met, and with all this, requires only six respirations per minute to sustain a most animated talk. These statements may be substantiated by any physician willing to sacrifice an hour or two to Dr. Lanphear.

We do not think that a secret such as Hall's affecting the life and health of millions, should be held for profit; we believe the joyful tidings should be freely imparted, and for this reason extract from the *Texas Health Journal* the following, originally taken from Hall's longevity pamphlet:

"Inject up the rectum enormous quantities of warm water. For some diseases the water is retained some time—until absorbed—in others it is allowed to pass off. The quantity used in each case depends, of course, on the abdominal capacity of the patient, even a gallon or two being necessary in some instances. No medicine used. All that is necessary is a family syringe and plenty of warm water. With this method sore eyes, Bright's disease, consumption, et al, are cured."

THE VACCINATION OF NEW-BORN CHILDREN.

It is a question with many physicians whether it is wise to vaccinate during the first few days of infantile life. A number of vaccinations by Prof. Max Wolff, of Berlin (*Virchow's Archiv.*), made during the first week, led him to results briefly embodied in the following conclusions:

1. New-born children may be vaccinated at once, with good results.

2. A diminished susceptibility to vaccination in new-born infants, as affirmed by many, does not exist.

3. Regarding the protective effects of vaccination, there is no ground for the assumption that these are not so far-reaching as in primary vaccinations at an older age.

4. New-born infants bear vaccination very well. The course of the vaccinia is practically without fever, in contrast with the fever always present, and sometimes high, in primary vaccinations later on. The severe general symptoms often seen in the latter are also wanting. Disturbances of the course of vaccinia in older children, by weaning and teething, do not here come into consideration.

Wolff calls attention to the following statistics: Deaths from variola in Germany in 1886, 155, of which

61 were infants under 1 year of age; in 1887 there were 168 deaths, 56 under 1 year. In the variola epidemic in Koenigsberg in 1887, 159 cases of variola were recorded; 45 of these were children under 1 year of age, of which number 32 died. In view of these facts Wolff earnestly recommends the vaccination of children, otherwise healthy, as soon as possible.

Strychnine as an Antispastic.

At the Berlin Congress Dr. Benedikt, of Vienna, read an interesting paper on strychnine as an antispastic. He was led to use it for that purpose by the case of a girl, æt. 12 years, with chorea minor; there were frightful snapping motions of the jaws, and sudden but slight contractions in the extremities. After the fruitless use of all pharmaceutical remedies, of electricity and of hypnotism, he happened to think of Trousseau's experiment with strychnia preparations in chorea minor, and accordingly ordered the subnitrate of strychnia in $^1/_{20}$ grain doses four or five times daily. The action upon the facial contractions, which were quite severe, as well as upon the other jerkings, was eminently successful, and under this treatment the patient fully recovered. Benedikt now took up experimentation with strychnia in a wide range of diseases.

The action of strychnia in this case at first struck him as paradoxical, and a little reflection considerably added to his surprise. It was strange, for various reasons, that a remedy which, in a physiological state, brings about spasm by acting on the motor centers, should cure spasms when these were brought about by anæmia of the conducting fibers. He believes it to be high time to clear away the confusion and the conflicting ideas which have existed and still do exist regarding the essential origin and nature of spasm.

In his trials with strychnia since his first favorable result, Benedikt has gotten fairly good effects, though not with a great degree of constancy, in forms of chorea major, particularly in those affecting phonation and respiration, but above all, in those cases which must be regarded as neuroses with absence of any lesion.

He has not yet made use of it in contractures and epilepsy, and has gotten negative results in the spastic forms of co-ordinative-occupation neuroses; the drug appeared to have considerable influence in paralysis agitans, more especially when combined with the suspension treatment.

Abasing Hypnotism.

The following story, taken from the *Republic*, and which, by the way, is not without the bounds of possibility, if true, is a startling illustration of the manner in which hypnotism may be abused, and shows the necessity of the enactment of laws which will limit its practice to strictly therapeutical ends.

"Chattanooga, Tenn., Sept. 2.—Several weeks ago pretty and winsome Laura Culver disappeared from her paternal home on William street. She was but 15 years of age, but bright and intelligent. For some time past she had complained to her father of being perplexed by the attentions of a strange man. The girl said that he appeared to exercise an influence over her, and that she was afraid of him. The parents paid but little attention to her complaint, until one day several weeks ago she disappeared. Laura had been left at home one day in care of the house, but upon her parents' return had left.

Inquiries among the neighbors developed the fact that a strange man had stood in front of the house and shortly afterwards the little girl came out, and, as if asleep, had walked away with him. The neighbors' attention had been attracted by the man and they were positive he had not said anything, and were unable to account for Laura's going with him. Mr. Culver then remembered the girl's statement and gave the police a discription of the man., After a two week's search the detectives succeeded yesterday in locating the man and the girl in a house on Highland Park. They arrested the man, who gave the name of Richard Adams but refused to give futher imformation. The girl was still in a stupid condition and did not appear to realize what was going on. Phiscians were summoned and succeeded in arousing her from the spell. They examined the girl and found that she had been asaulted. The girl states that she knows nothing of what happened after she left home until she returned two weeks later. The physicians, in view of these circumstances, pronounce the case one of hypnotism."

MEDICAL ITEMS.

The St. Louis Medical Society inaugurates its winter session by meeting on Saturday, September 20.

Typhoid Fever and Venereal Disease.—Isham, in the *Lancet Clinic*, mentions four cases in which the supervention of typhoid fever apparently cured pre-existing gonorrhœa. The same good result was noticed in two cases of syphilis.

Did not Find Laveran's Corpuscles.—Dr. Bruno, the pathologist of Charity Hospital, New Orleans, has not had Osler's and Councilman's success in finding the hæmatozoön of Laveran in the blood of many cases of malarial fever that he has examined.

A Fæcal Tumor Removed by Laparotomy.—The *Buenos Ayres Standard* gives the details of an operation performed by Dr. Hausmann, at the Buenos Ayres German Hospital, for the removal of a fæcal tumor in the ascending colon. The patient had suffered from chronic intestinal obstruction for ten years, which was relieved only by the most violent purgatives; all at-

tempts to dislodge the tumor per rectum failed. The incison in the colon was 16 cm. (6¼ inches) in length, and the fæcal concretion, when removed, weighed 630 grammes (20 ounces). The incision in the colon was closed with four rows of silk sutures. Recovery was uneventful.

THE EXPOSITION is again in full sway. As it is an institution of the people, by the people and for the people, our profession should not be backward in rendering the tribute at least of its dignified presence at our great educational institute—of both the fine and the practical arts.

SEVEN HUNDRED PAPERS.—This is the reported number of papers submitted at the Berlin Congress. The paper presented by Professor Bouchard, of Paris, required two hours for its delivery. At that rate, it is difficult to conceive how justice could be done to each contributor, or at what date discussions would be in order.

ARNICA ERUPTION.—At a meeting of the Biological Society, June 21, 1890, M. Dupuy mentioned the case of a patient who was attacked by a pseudo erysipelas in consequence of an application of tincture of arnica. He regarded the fact as very curious, and remembered that essence of rue possessed a similar action.—*Le Progres Medical.*

THE FRENCH SOCIETY OF HYGIENE will award in 1891 a gold medal of 200 francs, also a silver medal and two bronze medals, to the authors of the best essay on the following subject: "What is to be done, before the arrival of the doctor, in case of a street accident, or accident in a factory?" Further information, 30 rue du Dragon, Paris.

WE MARVEL at the placid equanimity with which the *Clinique* appropriates from the REVIEW the conclusions of Dr. Lanphear's paper on the "Treatment of Peritonitis" without pausing to go through the customary journalistic courtesy of crediting the medium of its presentation—although that custom is carefully adhered to in making the other selections.

THE RIBERI PRIZE.—The Turin Academy of Medicine has proposed the following theme for the Riberi Prize of about $3,750: "Researches on the Nature and Prophylaxis of One of Several Diseases of Man." Works may be sent printed or in manuscript; they may be in Italian, French, or Latin; and printed works must have appeared since 1886. The date limit is December 31, 1891.

LEAD-WATER AND CANTHARIDES.—Dr. Pied writes, in the *Gaz. Med. de Nantes*, that it is impossible to raise a blister by application of Spanish fly to parts which have been bathed in lead-water. The reason of this is probably that a chemical reaction occurs, an insoluble cantharidate of lead being formed. When it is desired to blister a part upon which lead lotion has been used, it is necessary to scrub the skin thoroughly with soap and water, or to apply first some other substance, such as tincture of iodine, which will combine with all the oxide of lead present upon the surface.—*Medical Record.*

AN ENORMOUS NASAL POLYP.—Schmiegelow (*Med. Selskob i Kjobenhavn*) demostrated, at a recent meeting of the Copenhagen Medical Society, a nasal mucous polyp which was five inches in length and extended through the right nasal cavity, prolongations reaching to the edge of the soft palate. The growth was removed with a wire loop; and its point of origin found on the posterior end of the lower turbinal.—*Annals of Surgery.*

PERMANGANATE TREATMENT OF SMALL-POX.—Gawalowski reports the successful employment of baths, colored rose red by the addition of potassium permanganate, in the cure of the eruption of variola and for the reduction of excessive high temperature. The general state under these circumstances was found to improve, the pustules looked better, and the progress of the case went on rapidly toward recovery without any relapses.—*Med. News.*

RENEWED INVASION OF THE GRIPPE.—It is reported in the lay press that la grippe, after having already reached the epidemic stage in Paris and other European cities, has again shown itself in the East. It is said that there were more than 200 cases in Easton, Pa., in the last week in August. It is probable that this invasion is more imaginary than real; that our Eastern friends are still suffering from the abstraction of nervous tone wrought by the previous visit of la grippe.

THE CONSUMPTION OF SALT.—According to some statistics recently published in France, the annual consumption of salt in England exceeds that of any other country in Europe. For while in France the amount is estimated at about 30 pounds, Italy 20, Russia 18, Austria 16, Prussia 14, Spain 12, Switzerland 8, the Englishman requires no less than 40 pounds. The *Hospital Gazette* thinks that perhaps this is the secret of British thirst. If so, it offers an easy solution to the drink question, which the temperance party should not be slow in adopting.

TO RENDER CORNEAL ABRASIONS VISIBLE.—An easy and practical method of rendering abrasions of the cornea visible has been introduced by Dr. R. L. Randolph, of Johns Hopkins University. He instils into the eye a drop or so of a solution of fluorescein (fluorescein, gr. x.; sodii bicarb., gr. xv.; aquæ, f℥j), when every excoriation of the cornea becomes at once stained, while the uninjured epithelium does not stain at all. The stained

portions of the cornea retain their color from half an hour to several hours. This staining of every minute point whence the epithelium has been removed enables the observer to see the full extent of the corneal injury and is of especial aid in locating small foreign bodies in the cornea.—*Cleveland Med. Gaz*

Is Diabetes Contagious?—Schmitz asks the question (*Berlin Klin. Woch.*), struck by the large number of cases to be found at a thermal station frequented by diabetics. Women in apparent health are often seized suddenly with diabetes while they are caring for diabetic husbands; even when no heredity can be traced, and no special cause exists. In one case a woman of healthy antecedents married a diabetic. Shortly after his death she was found to be herself affected with glycosuria; but, marrying again, her second husband was soon attacked with diabetes.—*Times and Reg.*

Death from a Bee-Sting.—According to the telegraphic columns of a local daily, we see that on August 17, a wealthy stock raiser, of Syracuse, N. Y., named Alexander S. Baker, was stung on the nose by a honey-bee, and died within ten minutes. The paper goes on to say that "Physicians say that it is one of the strangest cases ever known of. Thirty-two years ago he was stung on the back of the neck and nearly died from the effects. Since that time he has not had a pulse of more than 45. It is said five years ago he was stung with a similar effect, and then sold his bees."

The Use of Buttermilk in Vomiting.—Dr. Stanley M. Ward writes, in the *Therapeutic Gazette*, that he has found fresh buttermilk very serviceable in relieving vomiting of various forms, even at times the vomiting of pregnancy. The remedy is administered ice cold, in doses of about half a teaspoonful, repeated every fifteen or twenty minutes. In the case of children with cholera infantum he has often succeeding in quieting the stomach by interdicting everything else and using a few drops of fresh ice cold buttermilk at intervals varying in length according to the severity of the case.—*Med. Rec.*

Malarial Fever and Eucalyptus Drainage.—The planting of eucalyptus trees for the purpose of draining the soil in malarial districts is one which has met with some success. The Trefontane Convent at Rome had become positively uninhabitable, owing to the malaria which attacked—in many instances with fatal results—its inmates. Senator Torelli presented a bill proposing that the estate annexed to the convent should be planted with eucalyptus as an experiment against malaria. The bill was passed, and the Trappist monks planted thousands of eucalyptus plants of all species on the estate. But still the malaria raged, and several monks suffered severely. It was, however, remarked that it was only the monks who had their cells looking on the central cloister who fell victims to the malaria. This suggested the idea of planting four eucalyptus trees at the four corners of the cloister. The plants, sheltered from the winds, soon grew to a great height. The immediate result was the complete draining of the soil in the cloister, and the disappearance of malarial fever from the convent.—*Brit. Med. Journ.*

Vomiting of Pregnancy.—When this symptom proves absolutely intractable, and it reaches such a degree as to endanger the life of the patient, Pugliatti (*Morgagni, 1889*) recommends the induction of abortion. For this purpose he advises the introduction of bougies having a thickness 6-10 mm., extending 5 or 6 cm. into the cavity of the uterus. After 4 or 5 hours another and somewhat larger (2-3 mm.) bougie is inserted, this is folowed by a third, which is allowed to remain several hours or until distinct contractions of the uterus are observed. The author claims that this method is free from danger, and with it the fœtal membranes are preserved.—*J.A.M.A.*

Treatment of Chancres by Creolin.—In the *Bulletin Generale de Therapeutique*, July 15, 1890, Busque, of Brazil, writes a note to Dujardin-Beaumetz detailing his experiences in the treatment of chancres by this means.

His custom is to apply to the sore a solution of the strength of from 12 to 20 parts to 1,000, and he believes that the progress of the malady is shortened and relief speedily obtained. Compared to idoform Busque thinks the solution of creolin equally serviceable. The best treatment, however, is to combine these drugs, using the creolin solution as a wash and the iodoform as a dressing.—*Med. News.*

Facial Paralysis Following Tooth-Extraction.—Dr. Watson (*Brit. Dent. Jour.*) observed an interesting case of sensory and motor paralysis in a lady who had had the second lower bicuspid and the first molar tooth extracted under anæsthesia by laughing-gas. On awakening from the narcosis she complained of want of power and sensation of the lip of the affected side. On examination a portion of the lip about the mental foramen was almost wholly paralyzed. The nerves had not resumed their functions during the six months that the lady was under observation. Watson assumed the cause of the paralysis to be stretching the dental nerve, which was in some way joined with or adherent to the roots of one or both teeth.

The Adulteration of Phenacetin.—It is said that phenacetin is very largely adulterated with antifebrin, which is much cheaper. The following reaction will serve to detect the fraud: Half a gram ($7\frac{1}{2}$ grains) of phenacetin is boiled in a test-tube with 5 to 8 cm. ($\frac{1}{2}$ dr.) of water, and then allowed to cool, and is filtered. Most of the phenacetin will separate on cooling. The filtrate is boiled with a little nitrate of potash and dilute nitric acid, a few drops of Plugge's reagent (a solution

of nitrate of mercury with a little nitric acid) added, and the mixture again boiled. If no red coloration appears antifebrin is either absent, or present in less proportion than 2%, and it is safe to say that where adulteration is practiced, it is to a greater extent than 2%. —*Ned. Tijdschr. voor Pharmacie.*

To Avoid the Toxic Effects of Cocaine.—Dr. Isadore Gluck, in *Merck's Bulletin*, recommends the following formula for cocaine, which he has used for over a year in local anæsthesia, without having to deal with the toxic effects of the drug:

℞ Phenol - - - - - - 2 drops.
Aqua distillata - - - - 1 drachm.
Shake until solution is perfect and then add
Cocaine hydrochlorate - 10 grains.

The advantages of this combination are:

1. Prevents toxic effects.
2. Increases the anæsthetic effect.
3. Prevents congestive reaction.
4. Prevents decomposition of the solution.
5. Renders solution aseptic.

Asiatic Cholera now prevails on the Arabian shore of the Red Sea, in Cairo, at Baku and Nicolaieff, in Russia, and in several provinces of Spain. From Valencia the disease has been carried to several other coast provinces, to Madrid and across the country to the borders of Portugal. Cholera first appeared near Mecca this year on July 28, and the daily mortality in Mecca and Cairo was several hundred a week later. At first the Egyptain Government sought to bar out the disease by preventing the return of the pilgrims northward, and the strictest quarantine was enforced, but, in all probability, the infection had passed before these precautions were taken, for there are cases of cholera in Cairo, and it is probable that there are cases at ports futher westward on the southern shore of the Mediterranean.

Tally Another for Christian Science.—Another case of Christian Science malpractice is engaging the attention of the people of Elkhart Ind., and excitment is at fever heat over the matter. The 2-year old infant son of William Sanders, a prominent citizen of that city, died on Sept. 2, attended only by Mrs. John Lesher, a supposed "healer." When the child was taken ill Mr. Sanders, instead of summoning a regular physician, requested Mrs. Lesher to go and see the child. She said it was not necessary, that she could treat it just as well where she was; so home went Sanders, in his blind zeal, and saw his child die without summoning medical aid. It seems his wife had little to say in the matter, but left it all to her husband, who has been for several years a devout believer in the science. The indignation of the entire community has been aroused against Sanders.

The McArthur Hypophosphite Company offer some very seasonable information on title page. Please read it and make a thorough test of the Syrup, which they invite you to do, free.

BOOK REVIEW.

A Practical Treatise on Headache, Neuralgia, Sleep and its Derangements, and Spinal Irritation. By J. Leonard Corning, M.A., M.D., Consultant in Nervous Diseases to St. Francis Hospital; Fellow of the New York Academy of Medicine; Member of the New York Neurological Society, etc. Second Edition. With an Appendix: Eye Strain, a Cause of Headache. By David Webster, M.D., Professor of Ophthalmology in the New York Polyclinic; Surgeon to the Manhattan Eye and Ear Hospital, etc. In one large oct. vol. nearly 300 pages. Price, $2.75. E. B. Treat, Publisher, 5 Cooper Union, New York.

In this volume the author has undertaken the difficult task of explaining the nature and treatment of those pains about the head, which constitute such a fruitful source of misery. Dr. Corning is eminently qualified for the work, and has long been known to the profession as a brilliant and indefatigable laborer in the cause of practical neurology. His contributions to neurotherapeutics are among the most practical and suggestive additions which have been recorded during recent years. To rare powers of perception Dr. Corning unites, in an eminent degree, the faculty of imparting knowledge in an entertaining manner. His style is at once lucid and forcible, not the least of his charms being the power to awaken thought as well as to impart information.

In all matters involving the treatment of pain Dr Corning is an acknowledged authority, and the precepts which he inculcates are alike worthy of the physiologist and the accomplished physician.

The present treatise on "Headache and Neuralgia" is replete with suggestion and useful matter, and no thoughtful physician can fail to derive both inspiration and practical assistance from its perusal.

LITERARY NOTES.

The Home Maker.

This excellent periodical comes to us with a change of dress, and is more attractive than ever.

Amongst the numerous contributors for September we notice the names of Lillie B. Chase Wyman, E. H. Jones, M.D., Josie Livingstone Wetmore, Hester M. Poole, Frances Lee Pratt, Eva Lovatt Carson, E. A. Matthews, and Richard Bauman.

For the October number, "Home Life of General U. S. Grant," written by his widow, is promised.

CORRESPONDENCE.

"TRAPPED."

St. Louis, Sept. 1, 1890.

Editor Review:—Absence from the city and a multiplicity of duties after my return prevented me from

seeing, until just this moment, Dr. W. F. Wilkins' communication in your journal of August 16. In reply I have just this to say :

After two or three of Dr. Wilkins' communications had appeared in the *St. Louis Medical and Surgical Journal* a couple of years or so ago, we received from two highly reputable physicians of Ottawa, over their proper signatures, protests against our allowing further communications from Dr. Wilkins to appear in the *Journal* without first verifying his statements. They forwarded us what we deemed and still deem convincing evidence that at least a portion of his alleged surgical exploits were pure "fakes." His first letter in regard to his discovery of the "organism" in the case of eczema reported from Ottawa, was then in type and in fact in print, and as there was a *possibility* of its truth we concluded to let it go. Shortly afterward came the first communication from him in regard to the cultivation of the so-called organism, which he had decided was a "sponggia."

Now, as all natural history students know, the spicules of the fresh water sponge, such as he had claimed to have found at least, are simply the skeletal residue after the death and disappearance, by decay or otherwise, of the living sarcode, and they consist of pure silex.

His claim therefore, as to the idea, of the cultivation of these particles of flint, of the production of eczema in a dog by inoculation with the exudate, etc., as detailed by him in his letters to me, and subsequently in his communication to your esteemed journal was simply an impossibility.

I believe that it is a duty incumbent upon every man of science, and especially every physician, to expose frauds in medicine in any manner in their power, and in this instance, after consulting with my colleagues and with the physicians of Ottawa, I determined to give Dr. Wilkins all the rope he wanted and let him expose himself. This I assert that he has done in the fullest possible manner.

As to the slide sent me, which on examination turned out to be the human spermatozoa, I gave him every opportunity to find out the mistake which he claims to have made at the time, writing him repeatedly in such manner that, had he sent me any slide other than the one intended, he would surely have found it out. As to what he says about the folly of sending a slip of spermatozoa to a professional microscopist in the hope of "fooling" the latter, I quite agree with him and can account for his having done so only by the supposition that at the time he sent it he was not posted in the technique of preparation and believed that I would see just what he claimed to have seen. I am led to this belief by an experiment recently made with semen, allowing it to dry on the slip and without putting on a cover-glass, examining the dried pellicle with reflected light. There I saw pretty much exactly the same appearances described by Dr. Wilkins—the albuminous liquid having dried around the spermatozoids in such a manner as to give them a spiculated appearance closely resembling the figures drawn by him.

I do not deny—in fact I was the first to publish, as far as I am aware—the fact that an eczematous eruption is sometimes due to the spicules of certain fresh water sponges. This is only when after long periods of drought ponds in which spongillæ grow in enormous quantities go dry, and the slimy sarcodes of the organism become sufficiently disintegrated by decay to set free the fasciculæ of flinty spicules. These skeletons, blown about by the winds, find a resting place upon the sweating hands or faces of those exposed to them, and the slightest friction causes them to pierce the skin and set up an inflammatory process. Such a case is reported by the late Henry Mills, of Buffalo, N.Y., who, when living, was the greatest American authority on fresh water sponges. It is barely possible that Dr. Wilkins may have seen a case of this sort at Ottawa; but that he should have been able to reproduce eczema by inoculating a dog with a drop or several drops of the exudate therefrom, or that he should have found other cases in Kansas City sufficient in number for him to be justified in the article published in your journal some time ago, I pronounce utterly improbable and impossible—a conclusion in which I will be sustained by every person who knows anything about the life-history of fresh water sponges, or who has ever investigated eczema.

But the matter is fortunately not one of mere belief. If Dr. Wilkins has been able to do what he claims to have done so frequently, he surely can repeat the exploit in the presence of practical microscopists. Fortunately Kansas City has several, one of whom is the able, well-known and prominent surgeon, Dr. J. D. Griffith, who will, I am sure, give him every opportunity to set himself right before the medical profession and the scientific world. Until he does so I can pay no further attention to anything he may write or say.

Fraternally, FRANK L. JAMES.

SOCIETY PROCEEDINGS.

TRANSACTIONS OF THE GYNÆCOLOGICAL SOCIETY OF CHICAGO.

Regular meeting, April 18, 1890. The President, James H. Etheridge, in the chair.

[CONTINUED.]

Dr. T. J. Watkins read a paper on

AFTER-TREATMENT OF LAPAROTOMY.

DR. JAGGARD.—I was very much interested in the paper, and particnlarly in the allusion to ether as a renal irritant, and the reader's reference to the fact that he had observed two cases in which ether was responsible for fatal nephritis. I believe that is one of Emmet's notions. The evidence upon which the notion is based, however, has never been adequately stated. Dr. Weir, of New York, has published a very interesting paper upon his observations of the effect of ether upon the

kidneys, and the result goes to show that ether employed as an anesthetic is not a renal irritant. In no one case has he been able to establish the fact that ether produces any irritation of the kidney above that of any extremely volatile substance. It would be interesting if the reader of the paper would give the evidence upon which he bases his conclusion that ether was responsible for the two cases of fatal nephritis. Can he exclude septic infection? I have had some experience with ether in puerperal convulsions. Emmet once said ether was strongly contra-indicated under these circumstances, on account of the danger of increasing the congestion. Upon observation of quite a number of cases I have never seen any adverse influence. As regards the hypodermic injections of ether in shock following severe operation, hypodermic injections of ether will create no result whatever, provided the needle is sterile and the skin is sterile. Ether does not come in the group of reagents that cause tissue reaction, of which turpentine and croton oil are examples. The value of ether may be questioned when it is given as a stimulant when the patient's blood is already saturated. When chloroform is used it is unquestionably one of the best diffusible stimulants.

In regard to the length of time the patient should rest in bed after laparatomy, this point was brought very unpleasantly to my attention a year ago. I had been nursing along my few laparotomies, some ten, trying to get up to a hundred without a death. The case was a difficult one for me—bilateral hematosalpinx, a tumor on each side about as big as a goose egg, with universal adhesions. I had a good deal of difficulty in getting at the tumors, ligating them, and securing a clean pelvic cavity, but finally accomplished this, and the first two weeks of the patient's convalescence were perfectly afebrile, with no complications whatever. At the end of two weeks the husband, a physician and a friend of mine, wished to remove his wife from the hospital, and the house physician, without asking my consent, gave him permission to take her home. She travelled about five miles in a carriage, worked around the house for a day, and perished a week later of a furious peritonitis. No autopsy was allowed. But the course of her convalescence in the hospital, the fact that all the bodily functions were normal, the urine perfectly normal, lead me to think there was some relation between getting up out of bed at the end of the second week and taking this drive, and the peritonitis. I remember when I was with Dr. Goodell in the University Hospital a case gave us a good deal of trouble, in which a woman got up at the end of eighteen days and went from Philadelphia to Pottsville; during the ride home the abdominal incision opened from above the umbilicus to the pubes and some of the intestines protruded, but fortunately when she got home a physician stitched up the wound, and she made an excellent recovery.

Dr. Parkes.—Mr. Chairman: I do not know that I have anything to say, simply because the paper leaves nothing open for discussion. It is such an admirable paper in every way that I do not think any one can find fault with it. I can see very plainly that the many points of interest that have been mentioned in this paper will come under the surgeon's notice at one time or another if he sees many patients. So far as the rule for treatment of patients under my charge is concerned, I must say that individually I give them very little, because I believe that if the patient has been prepared before the operation, no after-treatment is required.

Within the last two weeks I have done four laparotomies, some of them of moderate severity and some quiet severe in character. Those patients are all well; none of them have had complications of any kind, no discomfort of any kind, and have required no medication with the exception of a cathartic. I think this arises, however, from the care which the surgeon adopts with reference to the patient both before and during the operation. The rule with me has been, in reference to temperature, not to place any more relience upon it than upon any other symptom. The thermometer will frequently give a temperature astonishing to the nurse, and perhaps to the interne who is not accustomed to these cases; and you see the patient, and take into consideration all the symptoms presented, and pay no attention to it. A temperature of 104°, for instance, will not infrequently come from constipated bowels or accumulation of gas, so I cannot say I have any rule with reference to that; if a temperature precedes and is accompanied with other symptoms, exhaustion or malaise or headache, showing that there is some difficulty, I should accord my support to the suggestion of attempting to control that condition by the use entirely of sponging. I do not believe in the administration of any antipyretics. I believe that they are just putting on the patient an increased burden, to get rid of a poison which has to be eliminated in addition to the poisons of the disease. So far as my experience goes, the application of cold to exposed parts of the body has been sufficient to secure a falling temperature, if the trouble has not depended upon serious septic infection. I believe these cases of severe septic infection, if they do get well, scarcely ever do so because of the doctor, but by the grace of God. The most of them are better left alone rather than to have active interference further than continued stimulation with whiskey and milk, as my friend Dr. Wright once said: I believe in that in this condition as well as septic conditions from other causes. What will be the result of operative interference in cases of septic peritonitis is to be proven by further observation. It seems to be the general impression of the profession that such interference is justifiable in all cases of septic peritonitis.

Dr. E. C. Dudley.—Mr. President, Gentlemen: About fifteen years ago I was an interne in the Woman's Hospital of the State of New York, and in that capacity I had to attend to the after-treatment of laparotomies which were performed in that institution. They were done mostly by Thomas and Emmet and Peaslee; but I desire to contrast the treatment which was then in vogue

with the treatment which is apparently now in vogue, as shown by the essayist, who only recently, as an interne in the same institution, has been looking after the treatment of patients of practically the same operators. In my time any patient presenting herself for abdominal section was subjected for a week to a very careful diet, mostly liquid, which usually resulted in loss of strength, to counteract which she was given five or ten grains of quinine two or three times a day, and to prepare the nervous organization for the shock of the operation she was usually given pretty large doses of opium. After the operation had been performed, the quinine and opium in large quantities were kept up, the opium often to the extent of sending the respiration down to seven or eight a minute. That was done as a preventive measure, in order to get rid of the peritonitis which was supposed to threaten all these cases. I do not know what the proportion of death was, but it was enormous. Many doubtless died in consequence of the preparatory and after-treatment, and many others died from the fact that the operator did not take as much care of what he put in the abdominal cavity, as he did of what he took out. Now that clean surgery is the order of the day, much of this complicated preparatory and after-treatment has disappeared; indeed, most patients get through without any after-treatment at all beyond the mere administration of a cathartic or some other medicine, such as an individual would take in ordinary health. This paper goes into the details in a very admirable way; it is timely and valuable because cases do arise in which the after-treatment is necessary, but in this whole subject the times have changed and we have changed with them.

The author mentioned a certain enema of glycerin and sulphate of magnesium and water—about an ounce and a half of each. If I am not mistaken, this is a peculiar treatment which Dr. Watkins has used a great deal. I have adopted it with a great deal of satisfaction for the relief of distention. There is another enema of which I learned in Birmingham and Edinburgh, which is the regulation enema in Scotland and England—that is the so-called turpentine enema which is composed of about a pint of very stiff soapsuds to which have been added one or two drachms of spirits of turpentine. This is an excellent agent for cleaning out accumulation of gas in the bowels. I have used in the soapsuds strong beef tea instead of water, because a certain portion will be retained, and, being beef tea, will serve as nourishment for the patient. Dr. Keith, in Edinburgh, once told me that he always looked for the passage of flatus with a great deal of interest, and he always felt pretty sure that once the flatus passed the patient was safe.

As to the drainage tube, I use one no larger than a lead pencil; it fulfils the indications perfectly, and leaves a small opening to heal. Like a previous speaker, my first ten cases of laparatomy had all recovered, and I was working my way gradually up to a hundred without a death, when I had a patient in a hospital who, without my knowledge or consent, was removed from one room to another; and in the night, while the watch was away, she paid a visit to another patient, who gave her some hard-boild eggs and Limburger cheese. This was on the 15th, and on the 17th she died, and the diagnosis was garbage on the intestines.

[TO BE CONTINUED.]

SELECTIONS.

FORMULÆ FOR THE PREPARATION OF SURGICAL MATERIALS.

A. Solutions: 1. Acid Sublimate Solution (Dr. Ernest Laplace's suggestion). 1. The concentrated solution, as per following:

℞ Hydrarg. chlorid corrosiv, - - ℈iv.
Acidi hydrochlorici c. p., - - - ʒvj.
Aqua q. s., ad., - - - - ℥viij.

M. S.: Each ounce contains 10 grains $HgCl_2$.

2. The irrigating solution. One ounce of the concentrated solution with water q. s. ad. Oij will be 1 to 1,536, which is convenient, because easy to prepare extemporaneously, called 1 to 1,500 solution.

II. Carbolic Solution.—

℞ Acidi carbolici c. p., - - - ℥j.
Aqua, - - - - - ℥xxxij.

M. S.: Approximates closely a 3% solution.

III. Iodoform-Ether (8 Per Cent Solution.)—

℞ Iodoform (vide BI) - - ℈j–iij.
Etheris, - - - - - ℥ij.

M. S.: As directed.

Uses: For thoroughly covering a surface with iodoform, the ether rapidly evaporating. On fresh raw surfaces causes severe pain. N. B.—If kept too long will cause vesication, owing to large amount of iodine generated.

IV. Iodoform-Glycerine Emulsion:

℞ Iodoform, - - - - - 50.
Glycerine, - - - - - 30.
Aqua, - - - - - - 30.

M. S.: Shake before using.

Uses: For filling cavities and for injecting cold (tubercular) abscesses, when the ethereal solution would be considered objectionable on account of pain and danger of causing sloughing.

V. Iodoform-Collodion (8 Per Cent Solution.—

℞ Iodoform, - - - - - ℈ij.
Collodii flex., - - - - - ℥j.

M. S.: To be used as directed.

Uses: For hermetically sealing aseptic wounds. N. B.—If kept too long may vesicate severely.

VI. Aseptic Salt Solution (6 Per Mille Solution).

℞ Sodii chloridi, - - - grs. xlvj.
Aquæ q. s. ad., - - - - Oj.

M. S.: Boil for one-half hour. Keep in a Florence flask, stopped with sterilized cotton.

Uses: 1. Where an antiseptic solution is considered objectionable, or for the washing of a previously antiseptically-washed wound. 2. For saline transfusion, raised to blood temperature. N. B.—It is well to filter this solution before boiling, especially if it be used for the second purpose.

VII. Alcoholic Ether Solution of Iodoform (Suggested, I believe, by Dr. Dawborn).—

℞ Alcoholis et etheris partes equales.
Iodoformi (vide BI) q. s., ad. sol. sat.

M. S.: To be closely corked.

Uses: For keeping silk (vide DII) and catgut (vide DI). N. B.—Should be changed occasionally, owing to generation of iodine. Silk kept in this solution for a long time is more easily broken. Best prepared in small quantities.

VIII. Alcoholic Watery Solution of Sublimate.

℞ Hydrarg. chloridi corrosiv., - grs. v.
Aquæ, - - - - - ℥iij, ʒij.
Alcoholis, q. s., ad., - - - Oj.

M. S.: Solution of 200 parts water and 800 parts alcohol, originally suggested by Bergman for sterilizing and keeping catgut.

Uses: 1. For preserving rubber drains. 2. For disinfecting catgut.

IX. Alcoholic Solution of Sublimate.—The same as VIII without water. Uses: For preserving bone drains, decalcified bone plates, bone chips, and rigid rubber drains.

B.—Powders.—I. Iodoform, sterilized (bichloride washed).—Shake an ounce of iodoform with about four ounces of 1 to 1,500 sublimate solution in a good-sized bottle; filter through sterilized paper and dry at moderate temperature; keep in well-stopped bottle. Uses: For powdering surfaces, impregnating dressings, and making solutions III, IV, V and VII.

II. Sterilized Bismuth.—Prepared with subnitrate of bismuth treated as No. I. Uses: For powdering where iodoform would be irritating, and for drying up moderate surface secretions.

C.—Drains.—I. Rigid Rubber Drains (Dr. Javars). 1. Select the red variety. 2. Place for five minutes in concentrated sulphuric acid. 3. Wash in 75 per cent alcohol. 4. Keep in solution. A IX. Uses: In empyema, or wherever glass drains might be used.

II. Aseptic Rubber Drains.—1. Select the red variety. 2. Sterilize in Arnold sterilizer, or by boiling in ordinary kettle one-half hour. 3. Keep in solution A VIII. Uses: For ordinary drainage purposes. N. B. If softer tubes are wanted, keep in solution carbolic A II.

III. Glass Drains.—Sterilize by boiling, and keep in solution A I (2) or A II.

IV. Bone Drains.—1. Prepare tubes by boring and trimming into cylindrical form, or select smooth chicken bones. 2. Clean well after boiling. 3. Decalcify in 10 per cent solution HCl. 4. Keep in solution A IX, without any water. Uses: When drainage for only a few hours will be required, as these tubes collapse easily in serum.

V. Capillary Drains.—1. Horse hair should be cleaned first with soap and water and afterward boiled for half-hour and kept in solution A I (2). 2. Catgut (see D I). 3. Silk (see D II). 4. Gauze strips (see E I and II). 5. Schede's twisted glass threads (see glass tubes).

D.—Sutures and Ligatures. I. Catgut.—1. Select catgut of several sizes. 2. Cut into one foot lengths. 3. Place in ether five (5) days. 4. Place in Bergmann's solution A viii ten (10) days. 5. Keep in alcoholic ether solution of iodoform (see A viii). N. B.—This softens quickly when put into water at time of operating.

II. Silk.—1. Cut into one foot lengths. 2. Boil in solution A I (2). 3. Keep in solution A vii. N. B.—Sutures thus kept a long time, become weaker, but are aseptically reliable and strong if prepared in smaller quantities more frequently.

III. Silk-Worm Gut, Horse-Hair and Wire.—May be disinfected by heat, boiling one-half hour and put into carbolic solution A ii just before operating.

E.—Dressings and Sponges.—I. Wet Antiseptic Dressings.—1. Bleached cheese cloth or unbleached, deprived of fat by boiling with caustic soda or lye. Boiling with soft soap will help; wash out alkali. 2. Keep in solution AI (2) for use. Uses: For stuffing septic wounds.

II. Dry Aseptic Gauze or Cotton.—1. Boil the antiseptic gauze in sufficient quantity of plain filtered water. 2. Pour off water and continue heat till dry. 3. Keep in jars covered with sublimate cotton.

III. Dry Antiseptic Gauze or Cotton.—1. Prepare the wet gauze as in E I. 2. Dry slowly over moderate heat.

IV. Cloth for Field of Operation.—1. Old cotton cloths, not useful in any other way. 2. Wash thoroughly by boiling. 3. Keep as in I. N. B.—If used for laying instruments on, should be washed off in carbolic solution.

V. Cloths for Sponging.—Prepare as in I, or as in II, according to indication.

VI. Sterilized Iodoform Gauze.—1. Use gauze as prepared II. 2. Saturate a given weight of gauze with the quantity of iodoform (dissolved in solution A III) required to make 10 per cent (or 20 per cent) gauze. 3. Open out and evaporate ether at moderate heat. 4. Stuff in bottles tent-fashion. 5. Keep well closed. Uses: As protective or for stuffing cavities, especially suppurating and tubercular. The gauzes more difficult to make had best be purchased, such as Lister's latest gauze of double cyanide of mercury and zinc.

F. Sponges.—To Bleach, Soften, and Disinfect. 1. Select a good quality of sponge. 2. Beat with hammer on flat board. 3. Knock out the calcareous dust. 4. Put in 5 per cent HCl for one-half hour. 5. Wash in water, preferably hot. 6. Put in 1½ per cent solution of permanganate potassium for five minutes. 7. Wash

in water. 8. Put in 1½ per cent oxalic acid. 9. Put in Hcl solution for a minute. 10. If not free of permanganate repeat 8 and 9. Wash thoroughly. 11. Keep in solution A I (2) or A II. N. B.—If left in HCl too long, the sponges will be too soft to be serviceable. Or the method mentioned in Greig Smith's Abdominal Surgery may be employed. Borham's method: This is preferred by Greig Smith, after giving it a full trial. 1. Soak a few minutes in 1 per cent permanganate solution. 2. Wash repeatedly in water. 3. Place in solution of sodium hyposulphite (one half pound to one gallon), with four ounces oxalic acid to gallon. 4. Wash out thoroughly in cold water. For preparing sponges already used: 1. Wash thoroughly in hot water. 2. Place in soda solution (one pound to a dozen sponges) [Tait] for twenty-four hours. 3. Wash thoroughly in water slightly acid (HCl). 4. Boil for one half hour, or better, one hour. 5. Keep in solution A I (2) or A II. N. B.—Under no circumstances should infected sponges be used again. Gauze, as prepared in E II (see E V) makes an excellent sponging material.

G.—To Make the Hands Aseptic.—Furbringer's Method.—1. Wash and scrub well with warm water and soap. (The sapo viridis U. S. P. is very efficient and neat.) 2. Wash off the soap with alcohol (or ether.) 3. Before the alcohol (or ether) is dry, wash in the antiseptic solution. N. B.—The carbolic solution 3 per cent A II is efficient and does not offer the objection, which is the case with bichloride (forming the black sulphide deposit in the nails).

H.—To Disinfect the Field of Operation.—1. Shave a broad area. 2. Wash well with soft soap and brush. 3. Wash off with alcohol or ether. 4. Wash with carbolic solution A II, or bichloride solution A I (2). 5. Place cloths (see E IV) about, so as to protect from contact with all septic surfaces. N. B.—In some cases where there is much dead epithelium, a dressing of soft soap, diluted with oil, might with advantage be applied for twenty-four hours or longer to remove the scurf and facilitate the disinfection. Infected wounds must be disinfected by repeated irrigations and applications of wet dressings.—Dr. Parham, in *New Orleans Med. and Surg. Journal.*

THE RESIGNATION OF DR. S. T. ARMSTRONG.

The *N. O. Med. and Surg. Jour.* gives the following account of the incidents which led to the resignation from the Marine Hospital service, of Dr. Sam T. Armstrong, Passed Assistant Surgeon, formerly of this city:

"Dr. Armstrong was ordered to assume command of this station in January, 1890, on the death of Surgeon Goldsborough. Shortly after Dr. Armstrong arrived here, his senior assistant, Passed Assistant Surgeon R. P. M. Ames, refused to administer chloroform to a patient upon request of Dr. Armstrong, his superior, to do so, and, still declining, was suspended, in strict conformity with the regulations regarding subordinate officers. The suspension was reported to the department in Washington by both parties; the action of Dr. Armstrong was approved.

"Smarting under the reprimand, Dr. Ames preferred a number of charges against Dr. Armstrong, involving breaches of discipline, cruelty and abuse of patients and attendants, and violation of the regulations. These charges were investigated by the Surgeon General in person. The proceedings of the trial were published in the daily papers and are, doubtless, familiar to most medical men in New Orleans.

"The evidence brought out that in two cases of hypertrophied spleen Dr. Armstrong had compelled the patients to permit an examination of the region by percussion, and that in a case of indolent buboes he had required the patient to submit to a dressing. The evidence further showed that with attendants his actions had been in the line of strict discipline, in order to secure efficient service. The doctor might have been harsh at times, preferring to reprimand sharply than to dismiss an attendant whose negligence required reproof. We mention these points specially because they concern the only charges sustained, except that Dr. Ames' suspension was prejudicial to good discipline. The evidence showed, as we have stated, at most some harshness, and perhaps error of judgment, but no intentional abuse or cruelty.

"At the conclusion of the inquiry the impression pretty generally prevailed that Dr. Armstrong would be sustained, since it was well known that it would be impossible to administer properly an institution like this, devoted largely to the care of the roughest element in the community—roustabouts and deckhands of Mississippi river steamboats—without the strictest discipline. To the surprise of Dr. Armstrong's friends, he was reprimanded, superseded, ordered to report as an assistant to his successor, and forbidden to have command for at least one year.

"According to the terms of the letter conveying the sentence to Dr. Armstrong, we would have considered a reprimand sufficient; this, even, we do not think justified by the evidence. Surely, the sentence administered, unprecedented as it is, in the Marine Hospital Service, was totally unexpected, and we agree with Dr. Armstrong that it was intended, not for the benefit of the service, but to humiliate him for ulterior reasons unknown to him. He very properly, therefore, tendered the resignation of his commission, to take effect when relieved of command.

"A telegram published in the papers of New Orleans has announced that Surgeon General Hamilton had returned the resignation, since Dr. Armstrong had, save in this particular, been an efficient and capable officer."

CHRISTIAN SCIENCE.

Christian Science, in essence, is nothing new, but, hoary with age, now appears with a new name and new

garb; that is all. It is to be considered as on a par with Perkins' "tractors," the water of Lourdes, the cement of Knock, Long's liniment, the "weapon ointment" and "sympathetic powder," the king's "touch," faith, and all the numberless mysterious forms of healing which have been known since the foundation of the world. These all have had and still have believers thoroughly convinced of their reality and power, and all have had cures as numerous and miraculous as those presented by Christian Science. They all have had about the same successes and the same failures. None of them have satisfactorily authenticated cures of fractured bones, for example, or the specific fevers—measles, scarlet fever, small-pox, and so on—though all of these may have been recovered from under any or no form of treatment. Intelligent laymen, as well as physicians, know that most diseases have an inherent tendency to recover of themselves, perhaps $^{9}/_{10}$ or $^{19}/_{20}$ needing no medical assistance whatever, and in such cases the physician who does least harm does most good. No honest physician pretends to cure them, although he may assist nature in her effort to cure.

Many of our diseases are comparable to our prejudices; they come without reason, continue without reason, and neither reason alone nor medicine will dislodge them, but Christian Science may, the water of Lourdes, the faith-cure or any sufficiently strong mental influence. Our diseases, moreover, are sometimes our only occupation, and we are therefore not disposed to give them up. Many confirmed invalids, under confirmed medical treatment, are such only because their mental constitution, and its effect on the body, is not understood by the friends or physician, and what might easily be cured by proper means is thus suffered to go on for years under a total misapprehension. It is these cases principally which furnish to Christian Science and mind healers their most astonishing cures. Hysteria may simulate almost every form of disease—spine and joint affections, paralysis, blindness, deafness, fits, loss of feeling, shortening of limbs, dyspepsia, etc.—any one of which may therefore be cured instantaneously by any strong mental impression, as shock, fright, expectation, the command to "rise and walk," or the delirium of Christian Science.

Mental pain—as anxiety, disappointment, annoyance, dissatisfaction—has the same effect on the body as physical pain, and may therefore impair the appetite, digestion, nutrition, cause loss of sleep, emaciation and exhaustion. It is plain that if there be any weak point in the system it may now give way, be it the heart, lungs, stomach, bowels, liver, brain, or other part. What are the indications in such a case? To treat the particular organ affected—the weak part which has first failed— or the underlying low physical state and its antecedent low mental state? Of course the latter. Any thing which now properly diverts the mind from the bodily disorder, and particularly from its mental cause, will cure. Too often a symptom or set of symptoms coming on frighten and subdue the patient at once, instead of exciting in him a manly resistance. It is a well known fact that many symptoms and sometimes severe disorders may be bluffed off, snubbed, as it were, till they take their departure. A little of the Spartan training would do most of us good. Let us learn to live simply and die hard, fortify ourselves, and render the system invulnerable by the careful observance of the laws of health, rather than foster the spirit of dependence which renders us so helpless and vulnerable. Resources we must have within us. Let the will be in command and the nervous system under control. When the mind is preoccupied with useful thoughts and the body with useful actions, there is little room or leisure left for harmful introspection and attention to different organs, which do their work best when least observed.—*Extracts from a paper read before the Albany Institute by Selwyn A. Russell., M.D.*

HEADACHES.

The treatment of headaches of young children brings us into an almost special line of cases. In the city of New York, at least, these headaches are best treated, as a rule, by giving small doses of the iodide of iron, or of the citrate of iron and quinine. In school-children, headaches have often to be treated by removal from school, the use of tonics, change of diet, and the application of glasses suitable to any eye-defects that may be present. But glasses should be the last thing tried, unless the visual trouble is very marked. In some children, arsenic acts well.

Headaches among brain-workers require, as a rule, a different class of remedies from those among muscle-workers. In the former class, nervines, like antipyrine, caffeine, and the bromides, act well; while attention to diet, exercise, and the eyes is especially required. Among the laboring classes, especially women, anæmia, malaria, syphilis, and rheumatic influences must often be attended to. Among the best symtomatic remedies is muriate of ammonium in large doses, ½ to 1 drachm, given in wafers. In the headache of neurasthenia, menthol, 5 grains in hot water, gives relief, or a combination of menthol, 5 to 10 grains, and antifebrine in 5 to 10 grains. Phenacetin is also a good remedy. A practical point of importance in the use of antipyrine is the dosage. Often the best results are obtained by small doses frequently repeated. The much advertised effervescent preparations for headache contain too small a dose of caffein or of bromide to be of the best service. Of local applications, a spray or lotion of aconitia, sheet lint soaked in 20% solution of menthol and wrapped on the head, solutions of cyanide of potash after the method of Trousseau, and Rithet's tobacco and quinine snuff, are some of the measures indicated.

Every one meets now and then with cases of headache of obscure origin, obstinate in character, and intractable to every kind of treatment. The use of iodide of potassium and of the strong galvanic current and static elec-

tricity has been of service to Dana in some such cases. —*Dr. Henry Hun, in Annual of Universal Medical Sciences.*

THE TREATMENT OF EPILEPSY BY BIBORATE OF SODA.

I can fully endorse the statements of Dr. Rissien Russell and James Taylor in their interesting paper which appeared in *The Lancet* of the 17th, with regard to the value of borax in the treatment of epilepsy, and I agree with them as to the necessity for emphasizing this fact; for although here and there in medical literature it is recorded that fits have been cured by borax, the virtues of this remedy have for the most part been either ignored or under-estimated. Yet I think there can be no doubt that when the bromides, administered alone or in conjunction with belladonna, fail to relieve convulsive seizures, biborate of soda is the most likely drug to be of service. And I would also point out that boracic acid, so far as I have tried it, appears to be quite as efficacious as its alkaline salt. Its value is strikingly illustrated by the following case which was under my care at the Clinical Hospital about two years ago. It was that of a girl æt. 6 years, who had been subject to fits for a few weeks which the mother attributed to a fall on the head. The child attended as an out-patient for some time; but, as the fits appeared to be uninfluenced by the administration of bromide of potassium, she was taken into the hospital in order that the effects of treatment might be more accurately observed. During the first five days she took, every four hours, a mixture containing five grains of bromide of potassium and five minims of tincture of belladonna; but on each day she had from twelve to twenty attacks of general convulsions with loss of consciousness. The doses of bromide and belladonna were then increased to ten grains and seven minims respectively; but as the frequency of the fits remained unaltered, she was ordered to take five grains of boric acid in water every four hours. During the next four days the number of fits fell to nine and ten daily, and when the dose of boric acid was increased to ten grains the improvement was still more marked; the fits ceased on the fifth day, and the child subsequently left the hospital completely cured. Since that time I have repeatedly prescribed boracic acid and borax, both for ordinary epilepsy and for the convulsions associated with the spastic hemiplegia of infancy, and, as a rule, with good results.

As regards the mode of administration, it may be observed: (1) that both borax and boric acid are very soluble in glycerine; (2) that if we wish to prescribe borax alone, much glycerine should be excluded, for a mixture of pure neutral glycerine and pure borax is acid, owing to the presence of free boric acid; (3) that borax increases the solubility of boric acid to a considerable extent, so that it is often advantageous to give them in combination.

In conclusion, perhaps you will permit me to draw attention to the occasional value of borax or of boric acid in the treatment of coughs. A few grains of either drug will sometimes remove an obstinate cough in a young child, and especially if this be associated with an irritable condition of the fauces or pharynx. Boric acid is also highly spoken of by Atkinson, (*Practitioner, 1880*) as a remedy for puerperal fever; Bukhaloff (*Vrach, 1888*) considers it a very effective substitute for quinine in the treatmdnt of malarial fevers; aud Peyrusson (*Lyon Med.*, 1884) recommends large doses in cholera.—Judson S. Bury, in *Lancet.*

HERNIA OF THE OVARIES.

At the recent annual meeting of the British Medical Association, at Birmingham, Dr. Thomas More Madden read a paper on ovarian herniæ, in which he said that ovarian herniæ are amongst the most neglected, although clinically they should be included amongst the most important of the troubles that occur in gynæcological practice. In the great majority of cases they occur downwards into Douglas' space and in such instances the left ovary is that most frequently displaced. The next in point of frequency of these herniæ are those occurring in the inguinal regions, where they are either found above Poupart's ligament or, as is more commonly the case, follow the course of the canal of Nuck downwards and forwards, and so present in the labia where they may be readily recognized. In the former or directly downward variety of displacement, the ovary may be discovered on vaginal examination in the recto-vaginal fossa as a small, oval-shaped, firm, elastic and highly sensitive tumor, bulging forward into the post-cervical *cul de sac.* In a large number of cases ovarian herniæ, especially those in Douglas' space, result from the *vis a tergo* of abdominal or uterine tumors or from the tension on the appendages occasioned by displacements of the uterus.

Until recently these herniæ when inguinal were very generally compounded with enlarged glands; when labial with other tumors in that situation; and when downwards with pelvic abscess and hematocele. Or as often happens, they are mistaken for the retroflexed fundus uteri, and the patient suffering from an ovarian prolapse is vainly treated for a nonexistent retroversion of the uterus. There can now be no excuse for such errors. The sudden occurrence of the tumor, its physical character, the peculiar dull, sickening pain and the extreme tenderness and nausea manifest on examination are sufficient to enable a correct diagnosis to be made by any competent gynæcologist.

Where the ovarian herniæ takes place through either of the abdominal rings or downwards into Douglas' space, it may in some instances be reduced, as any other herniæ similarly situated. In the majority of cases, however, such herniæ are irreducible when discovered, and must either be supported in the former cases by

applying a hollow truss whilst in the latter case the prolapsed ovary must be replaced if possible and kept in position with a peculiar form of pessary exhibited, specially devised by Dr. More Madden for the purpose, or failing this, if the symptoms be urgent the ovary must in some cases be removed.

The foregoing views are illustrated in the paper of which this is an abstract by the details of several instances of ovarian herniæ, exemplifying the clinical history and treatment of such cases.—*Med. and Surg. Rep.*

Treatment of Insomnia in Children.—We must at first seek the causes, which are often very difficult to discover. In most instances insomnia is due to dyspepsia. It is therefore necessary to question the parents on this subject; if the child is nursing at the breast, we must inquire as to the method by which it is being fed, examine the breast milk and ascertain whether the breast is not given at irregular intervals. We have often to deal with a child who is prematurely weaned, and who is given too rich food—alcohol and tea or coffee.

Insomnia is also often due to the fact that the evening repast is too copious; a child should always, even at the age of three or four years, eat moderately at night and only light food, such as eggs, chicken, etc.

The etiology once known, our first care should be to combat the cause by prescribing a severe hygiene. In some cases, when this does not suffice, or when we have been unable to discover the cause, we must act notwithstanding, and turn our attention to the hypnotics. What, then, are the hypnotics which may be prescribed for a child.

The first of these hypnotics is opium; it has been endeavored to remove this drug from infantile therapeutics, but, notwithstanding, it is the best of hypnotics. But we must not administer opium to a child who is constipated, who has anuria, or who is troubled with itching; these are the principal counterindications. Prescribe laudanum in doses of half a drop under one year of age, and one drop additional for each year, in a potion.

The syrup of codeine is a good hypnotic, admirably supported by little children. At the age of one year, a teaspoonful of this syrup in a potion; under one year of age, half a teaspoonful.

The bromides are often useful; we give thirty centigrammes at six months of age, fifty at a year, administered at night, taking care to interrupt the indications after five or six days, to be renewed subsequently.

Chloral is an excellent hypnotic, without danger; it can be given in the same doses as the bromides, and the best way to administer it is by enema. We use a simple enema to clean out the intestine, then the chloral, associated with camphor or musk, with the yelk of an egg and a small quantity of water.

Chloral is especially useful when the child is threatened with convulsions, when there is present hiccough or twitchings; insomnia is in fact often the prelude of convulsions.

In some cases, antipyrine by enema in the same doses as the chloral or the bromides, is a good medicament.

There are also other hypnotics which should not be neglected, such as laurel water, musk, ether and valerian.—*Le Bull. Med.*

Inebriety and Marriage.—Dr. T. D. Crothers, in an editorial in the *Quar. Jour. of Ineb.*, July, 1890, says:

Public sentiment is shocked at the marriage of lunatics, and yet every day the lunatic inebriate is permitted to marry, and persons are ready to join themselves in such a contract for the purpose of curing them. In a recent murder case it appeared from the evidence that the murderer's father was married when intoxicated, and died a few years after by suicide. The murderer was the first child, and was a low paroxysmal drunkard, who had spent years in prison for crimes of drunken violence, and finally killed a passing stranger. In another case the courts refused to grant a woman a divorce who had recently married and found her husband an inebriate; a few months later this husband killed her in a drunken frenzy. In a certain family of entailed wealth there are living to-day, in the third generation, ten direct descendants who are feeble-minded, idiotic and insane; all clearly traceable to the marriage of an inebriate ancestor. The failure of the law to prevent and regulate such marriages, and the delusion that inebriety is a vice that is under the control of the victim, is one of the great obstacles towards social and legal reform. The efforts to raise the poor and degenerate inebriate and his family are practically of no value as long as marriage with inebriates is permitted. Recently the legislature of the State of Victoria in Australia has passed a law, which gives a wife the right of divorce if the husband is found to be a habitual drunkard. If after marriage she discovers that he is an inebriate she can also get a divorce. The husband can do the same with a wife if she is proven to be an inebriate. This is a clear anticipation of the higher sentiment which demands relief from the barbarous law which would hold marriage with an inebriate as fixed and permanent.

Iodoform-Emulsion in the Treatment of Tuberculous Joints and Cold Abscesses.—At the recent meeting of the German Surgical Association (*Centralblatt f. Chirurgie*, June 21, 1890), Bruns, of Tubingun, and Krause, of Halle, reported their results in the treatment of tuberculous joints and cold abscesses by means of injections of mixtures containing 1 part iodoform to from 10 to 20 of olive oil or glycerine, which is injected into the abscess cavity after the pus is evac-

uated. The operation may be repeated, if necessary, and usually within a few weeks or months the abscess diminishes, and finally disappears. Bruns has treated in this manner over 100 cold abscesses, among them 10 cases of psoas abscess, with 80 per cent of cures. He has also used the method in the treatment of tubercular pleuritis, and in 50 cases of tubercular joint-disease, with surprisingly good results, even in cases of long duration. If there are fungoid, tuberculous granulations in or around the joint he inserts a hollow needle, breaks them up and injects in one or more places from 30 mm. to 1½ drachms of the emulsion. If there is an abscess, the pus is withdrawn and the cavity filled with the emulsion.

Nearly all surgeons who discussed this paper were in accord with the author. Trendelenburg said that he had treated 135 cases in this manner. Von Eiselsberg said that Billroth had practiced the method with satisfaction in the treatment of cold abscesses and other tubercular diseases since 1881.

Krause reported 60 cases of joint disease treated by injecting a 10% emulsion of iodoform in glycerin, or a mixture of iodoform in water of the same strength. In 36 cases of knee-joint disease there were 15 cures, in 15 of hip-joint disease 4 cures, in 6 of disease in the tarsus 1 was cured, and in 5 of disease in the joints of the hand 3 were cured. All of these cases were far advanced when the treatment was commenced. If there are abscesses around the joint, Krause evacuates them and washes out the cavities with boric acid solution before injecting the iodoform. The injections are made every two, three or four weeks, according to the severity of the case.—*Med. News.*

Atmospheric Bacteria.—The *Abstract of Sanitary Reports*, July 25, 1890, contains (translated from *La Rivista Internazionale d' Igiene*, June, 1890), the following important conclusions with regard to atmospheric valuations of sea-air, made by Prof. Roster in the island of Elba:

The atmosphere of an island contains a much less number of bacteria than that of the mainland, and this irrespective of the direction of the wind with regard to the point of observation. The oscillations of atmospheric bacteria are much stronger on an island than on the mainland, owing to the alternate prevalence of sea and land breezes. The number of bacteria diminishes to an extraordinary degree when the wind blows from the sea, and correspondingly increases with the setting in of the land-breeze.

A very small extent of sea will deprive of bacteria air that has passed over the island, while a passage of 10 meters over land will charge the atmosphere with bacteria. Atmospheric bacteria increase in numbers with the velocity of the wind.

Rain is a most effective agent for diminishing the number of atmospheric bacteria, whether by direct action in liberating the atmosphere of suspended germs, or by consecutive action in rendering the earth humid and impeding the passage of bacteria from the soil to the air.

The great reservoir of atmospheric bacteria is the superficial soil, from which they are detached and transported by the wind.

Other factors, less energetic than the direction and force of the wind, rain and the humidity of the soil, but which must be taken into account, influence the quantitative oscillations of atmospheric bacteria. The night air contains fewer bacteria than the air of the day, and the atmospheric bacteria are more abundant in August than during the months of September and October, when the temperature is lower and the fall rains begin. —*Med. and Surg. Rep.*

Operation for Habitual Dislocation at the Shoulder-Joint.—At the meeting of the Berlin Medical Society, July 2, 1890, Prof. Max Schuller showed a boy, æt. 14 years, on whom he had performed, four years ago, an excision of the ankel-joint for an acute suppuration of the joint after an acute osteomyelitis of the tibia. The excision was subperiosteal according to von Langenbeck's approved method. The shape of the new joint is now quite normal, so that it is of some difficulty at first sight to say which is the operated joint. Besides the usefulness of the joint is so complete that the boy can run, jump, climb and share in all sports and gymnastics as well as his fellows.

Dr. Schuller finally showed a good specimen of habitual dislocation of the shoulder-joint, which he treated by excision of the joint. The patient was a young woman who, for 14 years, had had innumerable dislocations and at last could not use the arm for pains. Schuller found on the posterior part of the head of the humerus a depression made, he believes, by the pressure of the head on the inner border of the glenoid cavity, where it lay, seemingly, all the time. The glenoid cavity was eroded on its inner border and on the lower part it was irregularly sharpened as if it had been broken some time before. Schuller supposes, according also to his experimental studies (*Schuller's Surgical Anatomy* 1, Sec. 94,) that in his case a fracture of the rim of the glenoid cavity was the first cause of the recurring dislocation. This fracture can have this effect then, if the patient, after the reposition, is allowed to use the arm before the fracture is healed. A fracture of the head and of the tubercula could not be found and the scapular muscles were intact, as now; after healing of the excision, faradization induces rotation of the humerus.—*Med. and Surg. Rep.*

A Difficult Case of Turning Rendered Easy by Placing Patient in the Genu-Pectoral Position.—Edwin T. Ensor, M.D., in *Brit. Med. Jour.*—I was called some time ago, by an experienced midwife, to see a primipara at term: she saying a hand was present-

ing. I found not only a hand but also a foot and the head, the last being impacted in the pelvis, having forced down before it the posterior segment of the partially dilated os and cervix uteri, which it was injuriously compressing between itself and the promontory of the sacrum. The membranes had been ruptured a long while before I saw her, and the uterine contractions were nearly incessant. Patient declined chloroform, and, being on her left side, after attaching a tape to the presenting foot, I did what I could with the left hand in the vagina toward pushing the head above projection of sacrum, but without success. It then occurred to me that if I put her in the knee-chest position, so as to allow the womb and its contents, by virtue of their weight, to fall forward and downward, turning might be made easier. This I did, with the satisfaction of finding that I was enabled to complete the operation with the greatest ease imaginable; very slight pressure of the head, with simultaneous traction on the leg, being alone required. The child, which was of average size, was, as might have been expected, still-born.

I am not aware if this method has been suggested or practiced in similar cases before, and have not found it described in the text-books which I have at hand. I report it in the hope that it may serve others as well as it has done myself.—*Arch. of Gynecology.*

Aggravated Hemorrhoids.—1. In the more aggravated forms of hemorrhoidal disease the surgeon has to do with a veritable angioma, sometimes involving the whole circumference of the anal end of the rectum.

2. The anatomical relations of this vascular tumor are such as to render possible its enucleation and oblation without special hazard to life, and without involving especially difficult operative procedures. This has been demonstrated on a large scale by Mr. Whitehead, of Manchester, England, and is corroborated by the experience of many other surgeons.

3. The method of excision and suture is inherently a more desirable operation that other methods involving strangulation of tissue, ulcerative and suppurative processes. It is not, however, so easy or so quick of performance, and demands a greater degree of technical skill and experience for its safe employment.

4. The best final results from the operation can only be obtained by avoiding injury to the sphincter muscle, or to its nerves; by the preservation of all the integument at the verge of the anus, and by the even circular discission of the rectal mucous membrane above the growth.

The operation of excision though, in the more aggravated cases of hemorrhoidal tumors, often tedious and bloody, presents no difficulties not under easy control of ordinary surgical skill; its results are superior to those obtainable by any other means; it is, therefore, an operation to be commended, and to be accepted as a permanent addition to the art of surgery.—Pilcher, *Brooklyn Med. Jour.*

USEFUL FORMULÆ.

Treatment of the Uric Acid Diathesis.—In the treatment of the uric acid diathesis, Dr. Henry Pickard advises the administration of water in large quantities, believing that it is of use in assisting mechanically in the expulsion of uric acid that may be contained in the blood. Water alone possesses such slight solvent effects upon uric acid that to it should be added an alkali. Lithia greatly augments the solvent power of water and may be given in the following mixture.

℞ Carbonate or citrate of lithium 15 grains.
Pulverized sugar - - 1½ drachms.
Citric acid - - - - 3½ drachms.
Bicarbonate of sodium - 4½ drachms.

Mix and divide in sixteen powders, of which one should be given in a glass of water four times daily.

The solvent effects of the potassium salts are also well marked and they may be administered thus.

℞ Bicarbonate of potassium - 1½ ounces.
Citric acid - . - - 1 ounce.
Water - - - - - 12 ounces. M.

One ounce of this in three or four ounces of water makes an insipid solution that may be given even to children.

Some persons do not tolerate the alkaline carbonates well, and for such, the phosphate of sodium, administered in doses of from thirty grains to two drachms, is an efficient substitute.

The alkaline benzoates are also excellent solvents, and change the insoluble uric acid into the soluble hippuric. The benzoates of sodium and calcium are perhaps the best, and may be administered in solution or in pill form in doses of from three to thirty grains. Benzoic acid may also be used, the following being an excellent formula in which to administer it:

℞ Benzoic acid - - 15 grs. to 1 drm.
Phosphate of sodium - 2½ drachms.
Syrup - - - - - 7 drachms.
Water - - - - 3 ounces. M.

One-fourth to be taken at a dose.—*Jour. de Medicin de Paris.*

Emulsion of Salol is best made, according to Jouisse (*Nouv. Rem.*), as follows:

Take of

Salol,	gram.	4
Acacia,	"	4
Tragacanth,	"	20
Tinct. tolu,	"	10
Syrup,	"	30
Water,	enough.	

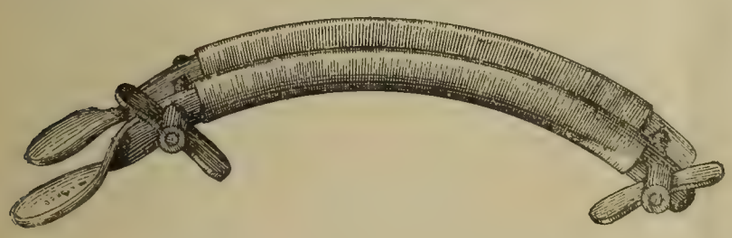
Mix the tincture of tolu with the water, and after partial precipitation, strain; then finish the emulsion. Use enough water that a tablespoonful shall contain 50 cgm. of salol. Recommended in fermentative troubles of the alimentary canal.—*West. Druggist.*

ORIGINAL ARTICLES.

NEW SURGICAL INSTRUMENTS DEVISED AND EXHIBITED BEFORE THE ST. LOUIS MEDICAL SOCIETY.

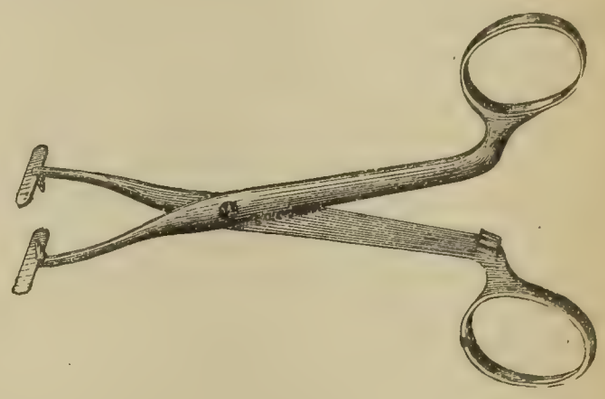
BY DR. G. WILEY BROOME, ST. LOUIS.

The report read before this society some weeks ago, relating to the curtailment of the scrotum for sexual disorder, created so much general interest in the whole subject that I concluded that the members of the profession might wish to know that the clamp used in the early operations has been modified somewhat. When making these earlier operations it was found that the holes in the clamp, through which the needle is passed for suturing the amputated scrotum, were not only unnecessary, but a disadvantage, and were sometimes the cause of septic infection. The disadvantage consisted in the fact that in thus suturing the four layers of tissue, some little distance away from their cut margins, it only tended to separate and increase the exposure of these raw surfaces. The union, hence, could not take place along the amputated borders of the dartos, and between their walls. This was necessarily slow, exceedingly unsatisfactory, and, besides, never firm and secure.



Furthermore, the exposed lips of the wound must desiccate, eventually undergo atrophic change, and during all this time they are exposed to septic infection. In consequence, also, of the innumerable small eyelets in the clamp, it is quite impossible to keep it clean and thoroughly free of microbic filth, and when it is not completely aseptic, you may see how readily septic matter may be carried into the needle-punctures. In order to overcome these objectionable features, I have had this instrument made, which I will ask the secretary to please pass to the members of the society for inspection.

You will note in the first place it is constructed with the view of asepticism. The rubber tubing covering each blade is to be used but once and then thrown aside. This rubber protects the soft parts from injury when the clamp is adjusted. There are no eyelets, and the instrument consists of but six different parts, two screws, two thumb-taps and two blades which are readily separated, one from the other, and conveniently cleansed or sterilized, and are quite as conveniently adjusted for use. The suturing is done through and the union is effected between the raw surfaces of the four free edges of the dartos and integument. Healing is accomplished by the first intention and the possibilities of septic infection are reduced to a minimum. The other surgical instrument which I have to present to the society is a pair of forceps combining the two qualities of pressure and traction.



The traction forceps was originally devised by Dr. Bernays, and the addition of the blades giving to his traction forceps the quality of hæmostatic pressure is my only claim of originality.

The ratchet or fixation quality of the forceps is made after the Pean idea. This instrument is a most serviceable one. When making many of the ordinary flap operations, it will be found that after a few moments' pressure and traction by means of this instrument no ligating in the parts will be required. In addition to the fact that the flaps may be conveniently carried out of the way of the operation, hæmorrhage may be entirely checked with the use of but a very few of these instruments. I should judge that one pair of this forceps may encompass a bleeding surface equal to three pairs of the ordinary hæmostatic forceps.

WEIGHTS AND MEASURES.

BY CHAS. O. CURTMAN, M.D., ST. LOUIS.

Professor of Chemistry, Missouri Medical College.

*Read before the Missouri State Pharmaceutical Association.

To ascertain the quantity of any portion of matter, two methods are usually resorted to. One of these, the gravimetric, determines the intensity of the force of gravity, which attracts the matter to the earth's center, by comparison with certain arbitrary standards, and as the pound, ounce, grain or gramme, which we call weights. The instruments used for making this comparison are called scales or balances and are of various constructions, according to the particular uses and degrees of accuracy needed.

The other method, the volumetric, consists in measuring the dimensions of length, breadth and height of the bodies, whose quantity is to be ascertained and re-

sults in giving us the volume or bulk of bodies, irrespective of their gravity. For these measurements also certain standards of comparison are adopted, which for linear dimensions are represented by such measures as the foot and its multiples and subdivisions, or in the metric system by the metre. From these linear measures, as a necessary base, we derive measures of capacity or volume, whose standard is either the cubic foot or cubic inch, which can be applied to solids, liquids and gases alike, or the customary hollow measures used in commercial transactions, as for instance, the bushel and its subdivisions for solids, and the gallon and its subdivisions for liquids. The relations of these standards of volume to the linear measures are not simple ones and the conversion of them into cubic inches, etc., requires tedious calculations. On the other hand, the metric system establishes very simple relations between its linear measure, its cubic measure and its ordinary standards of volume (or, as they are often called, measures of capacity) avoiding thereby the troublesome calculations for converting into one another the various measures of weight and capacity inherited by the United States from England, but long since changed in that country. By application of both these methods, the gravimetric and the volumetric combined, we are enabled to compare the weights of equal volumes of various bodies among themselves, and by referring them to certain easily obtainable standards we ascertain their specific gravity. The standard of this specific gravity to which solid and liquid bodies are compared is pure water at its point of greatest density (4°C., or 39.2°F.). Gases are compared either to atmospheric air or more recently to pure hydrogen gas at the temperature of 0°C., or 32° F., and at the normal pressure indicated by the barometer at 760 Mm (30 inches English). It is one of the great drawbacks of the systems now in common use in the United States, that there is no simple relation between the weight and the volume, or, in other words, that our ordinary weights and measures are convertible into each other only by processes of calculation so tedious that we avoid them whenever possible. Leaving unnoticed for the present the many commercial standards, let us for a moment consider the weights and measures most frequently occurring in the practice of the pharmacist.

To begin with weights, we have two systems, the avoirdupois, used for buying and selling, and the troy, used in compounding preparations and dispensing prescriptions. The avoirdupois pound equals 7000 troy grains. It is divided into 16 ounces of 437.5 grains, and 256 drachms of 27.34375 grains each. The troy or apothecary's pound contains 5760 grains. It is divided into 12 ounces of 480 grains each, and these into drachms of 60 grains and scruples of 20 grains each. I need not remind the practical pharmacist of the frequent misunderstandings arising among the public out of the use of this double standard.

The unit of the United States apothecary's *measure* is one of the several old English gallons, usually designated as the wine gallon. Its capacity equals 231 cubic inches. It is subdivided into 8 pints, each pint into 16 fluid ounces, each ounce into 8 fluid drachms, each fluid drachm into 60 minims. So that the subdivisions of the fluid measure from the ounce down correspond at least in number and name to those of the troy weight from the ounce down, the minim representing the grain, but the correspondence is in name only. Taking pure water as the medium of converting measure into weight, we should have a fluid ounce of pure water at a certain normal temperature weighing exactly a troy ounce; a fluid drachm of water equal in weight to a troy drachm, and the minim corresponding exactly to the troy grain. But such, unfortunately, is not the case.

For 1 minim of water at 60° F. (15.55°C.) weighs only 0.95 grains troy. Neither is there any lower temperature of water, down to its freezing point, at which it becomes dense enough to make the weight and measure correspond. The fluid drachm weighs 56.96 grains troy, instead of 60. The fluid ounce weighs 455.69 grains troy, instead of 480, making a difference of 24.31 grains troy between a weighed and a measured ounce of water, or a difference of a little over 5% by which the weight exceeds the measure.

In the case of the avoirdupois ounce the reverse occurs, for, while the fluid ounce of water weighs 455.69 grains troy, the avoirdupois ounce equals 437.50 grains troy, making a difference of 18.19 grains which the weighed ounce of water contains less than the measured one. The larger the denomination of weights and measures the greater becomes the difference.

The troy pound equals - -	5760	grains.
The avoirdupois pound equals -	7000	grains.
The pint of water weighs -	7291.11	grains
But is divided into - - -	7580	minims.

If the question were put to us to-day: Shall we adopt such an ill-convenient, incongruous system of weights and measures? there would not a single voice be heard to advocate it; but, unfortunately, we are not in position to adopt any system *anew*, but we have to deal with the fact that universal custom has made us the inheritors of a variety of weights and of measures based upon arbitrary standards, once in local use in various parts of England. In enumerating the apothecaries weights and measures, I have by no means exhausted the catalogue, for there are other gallons in use beside the wine gallon and the gallon which forms the eighth part of the Winchester bushel. The system has proved so cumbersome in England that it has been changed to some extent, by discarding the troy weight and adopting under the name of "Imperial Measure," a system of fluid measure in which at least the measured fluid ounce of water is equal in weight to the avoirdupois ounce, while the other subdivisions are still very different from each other.

For the accomplishment of simple relations of the measures of length with those of capacity and with weight the first step still remains to be taken.

In answer to the question, what shall we of the

United States do to ease the burden of the present confusion? I would refer to an exceedingly important precedent, which occurred at the close of the last century in the solution of our coinage question, which was almost identical with our present one of weights and measures. There was at that time an almost endless confusion in the quality, value and names of the various coins current in trade. The English system of pounds, shillings, with its well-known, but inconvenient mode of conversion was the legal one, but by its side there were used in the different states at least two old colonial shillings of different values, besides a great amount and variety of Spanish, Portuguese and old French coins, which reached the coast by the marine commerce and from thence rapidly spread to the interior. To end the troublesome confusion Congress adopted an entirely new system of coinage, based upon the Spanish silver dollar as its unit, and using the decimal system for subdivision and multiplication. So that the dollar was divided into 10 dimes, or 100 cents, or 1,000 mills, and the golden eagle equaled 10 dollars. The new national system was not introduced without trouble and protest, and side by side with it continued for years the circulation of the older coins and modes of computation, which to a small extent even reach to our days. Many of you, no doubt, remember well the old "Pine Tree Shilling" of New England, valued at 16⅔ cents; the ordinary shilling, bit or levy, at 12½ cents; the sixpence, also called fip or picayune at 6¼ cents, and the Spanish real with or without pillars, and the computation by bits survives in the expression two bits for 25 cents, and six bits for 75 cents, although our coinage system is now nearly a century old. But who would at present desire to restore the old confusion and abandon our present system of coinage?

In the variety of old coins and values we see a close analogy to our various weights and measures.

It is quite different in the metric system. The metre, the unit of linear measure, is the ten-millionth part of the distance from the equator of our earth to the pole. It corresponds in length to 39.37079 of our inches. It is subdivided according to the decimal system and its subdivisions named according to the three Latin numerals, deci for 1 10, centi for 1-100, milli for 1-1000, in the same manner as those of the dollar in our system of coinage. The tenth of the meter is called *deci*-meter, corresponding to the *dime*, and measures very nearly 4 inches; the one-hundredth is called the *centi*-meter, corresponding to our *cent* and measuring nearly two-fifth inches; the one-thousandth part is called the *milli*-meter, corresponding to the mill. The multiplication is in the same manner indicated by the four Greek numerals, deka for 10, hekto for 100, kilo for 1000 and myria for 10000; the *deka*-meter meaning 10 metres (corresponding to the ten dollar piece or eagle of our coinage); *hekto*-meter means 100 metres; *kilometer*, 1000 metres, being approximately the equivalent of two-thirds of the English mile.

From these measures of length there is the same transition to measures of capacity as in those now in common use. As the body measuring a yard in each dimension is called a cubic yard, that of a foot measure a cubic foot or that of the inch a cubic inch, a body measuring a meter in length, breadth and height contains a cubic meter, one of one-tenth of these dimensions a cubic decimeter, one of one-hundredth a cubic centimeter. Instead, however, of employing for common use the hollow measure, the gallon of 231 cubic inches, the pint of 28.875 cubic inches and the fluid ounce of 1.8047 inches, whose conversion into cubic measure entails troublesome calculations, the metric system makes its hollow measure to correspond exactly with the cubes of its measure of length. The unit, called the *liter*, measures a decimeter (1-10 meter) in length and height. It contains therefore 1 cubic decimeter, or 1000 cubic centimeters, and is the one-thousandth part of a cubic meter. The *liter* is subdivided again on the same plan as the meter, into 10 *deci* liters, 100 *centi*-liters and 1000 *milli*-liters, or cubic centimeters, each of which corresponds to 16.23 minims, so that 30 cubic centimeters very closely correspond to 1 fluid ounce.

The multiples of the litre are designated just as those of the metre, by the prefixes of the Greek numerals deka, hekto and kilo. The *hekto*-liter corresponding in size to a small barrel of 26.419 gallons.

The relation of weight to measures of capacity is in like manner very simple and exact in the metric system. Its unit is the amount of pure water of 4° C. (39.2°F.) contained in a vessel of 1 centimeter in length, breadth and height. The weight of this cubic centimeter of water is called the *gramme* and corresponds to 15.48234874 troy grains. It is divided in the same manner as the metre, into 10 decigrammes (of somewhat more than 1½ grains); 100 *centi*-grammes (of about 2-13 grains) and 1000 *milli*-grammes (of about 1-64 grain).

Its multiples are the *deka*-gramme, or 10 grammes, the *hekto*-gramme or 100 grammes and the *kilo*-gramme or 1000 grammes, the latter corresponding in weight to 2.203 pounds avoirdupois. The ounce troy equals 31.10349 grammes. The cubic meter of water weighs 1000 kilogrammes, forming the metric ton.

From the foregoing it is easily seen how much more simple and convenient are the relations between the measures of length, capacity and weight in the metric system than in our present one. It is this great advantage that has made it the favorite of chemists, scientists and all workers in exact dimensions of every kind. It is, strange as it may appear, the only system legalized by Congress (by the act of 1866) for the old English system, though universally received by custom, has never been legally acknowledged by the national authority. It has recently been made by the Pan-American Congress the legal standard for all commercial transactions for the nations of the American continent. It has by a unanimous vote of the convention for the revision of the Pharmacopœia been made the standard for the new edition of this national work, now in process of

preparation by the Committee of Revision. Yet for all this the writer is perfectly aware of the many difficulties in the way of its introduction. No reform, however beneficial, was ever introduced without struggle and contest, and it is not to be expected that the present case will be an exception. It is hard to teach an old dog new tricks. But while the force of old habits and the disinclination of many to accept anything new will be opposed, it is hoped that a clear understanding of the advantages to be derived from its acceptance will prevail and overcome the obstacles in the way. The old system is so cumbersome, that it is likely ere long to break down with its own weight, and the sooner the fight against the obsolete is begun, the sooner will the contest be ended and all feel better when it is over. In taking the steps for passing from one to another system, however, there are several ways and while some are direct and comparatively smooth, others are devious and round about and beset with all manner of irritation. If, for instance, you attempt to do metric weighing and measuring by retaining your present weights and graduates and by means of conversion tables calculate the values of the one system into those of the other, you will have no end of trouble and provocation from loss of time and exasperating errors in calculation, and your prayers for the condemnation of the meter and its friends will be loud and fervent. But if you spend a trifle in buying a set of metric weights from the kilo down to the milligramme and a few graduates from the liter down to the cubic centimeter and its subdivisions, and, if you wish to be extravagant, get a meter to stand in peaceable proximity to your yardstick, you will find that your balances will weigh a gramme as easily as they do a scruple now, that it is no harder to fill your graduate to the litre mark than it was to do so to the pint mark before, and that you can measure your blister plaster as easily by the metre rule as by the yardstick.

TRANSLATIONS.

FROM THE FRENCH AND GERMAN.

BY F. NEUHOFF, M.D., ST. LOUIS.

Healing of Wounds Without Drainage.

Dr. Reczey (*Pest. Med. Chir.*) no longer uses drainage in the treatment of wounds. He enunciates the following principles, which when strictly observed give results far better than the old treatment by means of drainage tubes.

1. Strict antisepsis during the operation.
2. Perfect checking of hæmorrhage.
3. Opening of all pockets by free incision.
4. A well applied antiseptic, pressure-exercising dressing.

The drainage tube seldom accomplishes its object. Occasionally it is even harmful; for, being a foreign body, it interferes with healing, and in the event a displacement of the dressing, it may favor the entrance of micro-organisms into the depths of the wound.

Again, the removal of the tube necessitates an early dressing of the wound, which gives an opportunity for infection from without, and furthermore interferes with the absolute rest so necessary for speedy union. To obviate this difficulty, tubes which in time become absorbed have been introduced, but they have not fulfilled expectations.

It is customary to place tubes where pockets are feared. Tendency to pocketing is, however, prevented by pressure bandages. These when well applied would also compress the drainage tube, and render it useless. Uncompressible drainage tubes have not proved a success.

The main argument, however, which is supposed to prove the absolute necessity of the drainage tube, is the possibility of imperfect asepsis causing infection of the wound. This would result in the slow formation of an abscess or the suppuration of the blood and wound secretions which might exist in a not well compressed wound. This process might remain local, or it might result in septicæmia. Of course where such infection occurs, the presence of a drainage tube is of great utility in giving speedy exit to the pus.

But it is precisely the tube which, through its canal, favors the entrance of germs, as is shown by the fact that the abscesses are always located at the end of the tube. The collecting of blood and secretions in a wound must be prevented by properly applied pressure. The less the chance for the formation of these secretions, the less the possibility for their becoming decomposed. As the tube can not prevent local infection, it does not prevent the general infection, which is subsequent upon the local process.

Asepsis is procured by Reczey by the use of $^1/_{10}$ to $^1/_{20}$% sublimate solution. All bleeding is carefully checked, and then a pressure bandage is applied. Even when through a faulty application of the pressure, some blood collects in the wound, it will afterward become absorbed without the formation of pus.

Since the drainage tube does not fulfill its purpose, nay is even worse than useless in fresh wounds where no previous suppuration has existed, there is no risk in discarding it altogether, even in the treatment of wounds in which suppuration has previously existed. The same principles which were observed in the former class of cases must also be followed in the latter class. All recesses must be opened by free incisions. The wound must then be curretted and thoroughly disinfected, and a pressure dressing applied. The free incisions change the sinuses into open wounds in which the retention of secretions is impossible.

Reczey has now treated in all 146 cases without drainage. Of these 53 involved bone surgery, as amputations, resections, etc.; 93 were of the soft parts, including large abscesses and herniotomies; 122 cases healed by

first intention; 15 with superficial suppuration; 5 with deep suppuration; 4 died. Of the fatal cases three were herniotomies, which died soon after the operation, thus precluding the possibility of the lack of drain having any causative relation in the death.

Mikulicz has operated on 160 cases without using drainage and his results have been almost identical with those of Reczey.—*Deut. Med. Zeit.*

Indications for Trephining.

In his late work on this subject Albert Albu states that the operation of trephining is indicated:

1. In subcutaneous injury of the skull:

a. When, after fracture or contusion of the cranium, there occur unequivocal symptoms of compression of the brain. which indicate probable supradural hæmorrhage from the meningeal artery;

b. When, subsequent to the injury, there occur local cerebral disturbances which point to cortical irritation from compression of the cerebral cortex from a depression or a splinter of the internal table, provided these disturbances have not disappeared in the course of 8 or 10 days. Bone depression alone never demands trephining.

2. In complicated fracture of the skull, especially when there are many splinters. In these cases, trephining has a prophylactic value, since it prevents diffuse suppurative meningitis and encephalitis. In very extensive fracture, however, trephining would be useless, and all that is necessary is to loosen the principal splinters and to apply an antiseptic dressing as a guard against infection.

3. In case of foreign bodies in the encephalon, trephining should only then be done when it is possible to remove the foreign bodies without searching in the brain for them.

4. In syphilitic or tubercular disease of the bones of the skull, provided only a small portion is affected.

5. In tumors of the cranium.

6. In collections of pus between the cranium and the dura mater.

7. In traumatic meningitis, as long as the process has not extended beyond the primary pus collection.

8. In chronic deep cerebral abscesses.

9. In circumscribed and not too extensive brain tumors.

10. In reflex epilepsy when there is distinct evidence of traumatism. And in typical Jacksonian epilepsy.—*Deut. Med. Zeit.*

Analgesic Power of Methyl Blue.

Dr. P. Ehrlich (*Deut. Med. Woch.*) has found methyl blue very efficient in relieving pain in neuritis, and in rheumatism of the joints, muscles and tendon sheaths. At first he injected the remedy hypodermically in doses of from 8 to 60 minims of a 2% solution. Afterwards he gave it internally enclosed in capsules containing 1½ to 8 grains. The highest amount given in one day did not exceed 15 grains.

The analgesic effect begins 2 hours after the administration of the drug, and (provided the dose administered is large enough) gradually increases, until considerable amelioration, nay even complete disappearance of the pain, occurs.

Ehrlich has found the following changes to occur in the nerves of living animals to whom methyl blue was administered.

At first there occurs a diffuse blue staining of the nerves. In the course of a few hours this diffuse coloration vanishes and irregular, intensely blue kernels appear in the axis cylinders of the nerves. After a while these kernels are again gradually eliminated.

It seems probable that the analgesic effect of methyl-blue is produced by the coloring matter forming an insoluble compound with certain elements of the nerve tissues, thus effecting some change in the chemical composition of the nerve, which produces analgesia.

The drug does not appear to have any influence over the local inflammatory processes in the affected joints or tendons. While it relieved the pain to a greater or less degree in 25 cases of neuritis and rheumatism, it had no effect on the dolores osteocopi of syphilis, nor on the pains due to a gastric ulcer. It has no antipyretic power. Nor does it have any influence on nervous excitation, hallucination or insomnia.

No untoward or unpleasant effects either local or general have been observed to follow the administration of methyl blue. Of course only the chemically pure article must be employed.—*Cent. f. g. Therap.*

Cough Lozenge.—The *National Druggist* gives the following formula, which is said to be that of one of the best and oldest proprietary cough lozenges on the market.

℞	Morphia acetate	1 part.
	Ipecac	3 parts.
	Licorice, in powder	120 "
	Gum arabic, in powder	120 "
	Sugar, powdered	240 "
	Oil of lemon	5 "
	Fresh lemon juce	75 "

Rub the powder together and add the oil of lemon and rub up again. Dissolve the morphine in the lemon juice, add to the mass, and thoroughly incorporate. Divide into lozenges weighing about 11 grains while still moist, and let dry thoroughly before putting into boxes.

While few practitioners are in the habit of prescribing cough lozenges, yet they are preferred by many patients on account of their portability. In such cases the above formula will be found efficient, containing, as it does, both sedative and expectorant properties, and having a pleasent taste.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, SEPTEMBER 20, 1890.

THE CURABILITY OF PHTHISIS.

The question as to the curability of phthisis is one that can never become stale or hackneyed, no matter how much or how often discussed. It is a subject that has engrossed the attention of many of the most able and earnest workers, and there seems to be reason to believe that we are now approaching a time when one of the most common and inexorable diseases known to medical science may be made to give up some of its terrors, and when lives may be saved other than by the powers of nature combined with chance. In a paper read before the recent International Medical Congress, Professor Robert Koch enunciated the firm belief, held by him for years, that there must exist agents for the cure of tuberculosis. He has made numberless experiments in the effort to substantiate his belief, but they have been carried out on a different line from those most usually adopted. Instead of beginning on human subjects, he has first used cultures of the micro-organisms; the agents which gave the most hopeful results in this series of experiments were then tested on some of the lower animals suffering with tuberculosis. Although many substances were found, capable of retarding the development of the bacillus in cultures, most of them proved altogether unreliable when used on the lower animals. This was not the case with all the substances employed, however, as may be seen from the following quotation from his essay:

"After many fruitless efforts, however, he at last found substances which not only retarded the development of the bacilli in the test-tube, but also arrested the growth of the bacilli in the animal tissues themselves. Guinea-pigs, under the influence of these substances, could no longer be inoculated with tuberculous virus successfully, and those that had already acquired tuberculosis in a marked degree, were improved, and the diseased tubercular process brought to a complete standstill, without in the least impairing the rest of the body."

Koch desires to experiment further on animals, and afterwards on man, before disclosing the nature of the substances used and the mode of using them. Should his hopes be realized, even if only partially, no honor will be too exalted for him, and few names will leave a deeper imprint on the pages of history.

While on this subject, it may be apropos to refer to another phase of it, the curing of disease by germ antagonism. In a recent number of the REVIEW we gave instances in which eczema, etc., were said to have been successfully treated by the inoculation of erysipelas. Something on the same order, reported in the *Munch. Med. Woch.* by Dr. Schæfer, of Kaishaim, is that of a case of pulmonary tuberculosis which markedly improved after an intercurrent attack of facial erysipelas. The phthisis was in an advanced stage in both apices, with well-marked symptoms, at the time the erysipelas came on. After the recovery from the erysipelas the hectic fever which had been present previously did not reappear, the temperature remaining normal. The general condition slowly improved, to the astonishment of all, the appetite became enormous, ominous intestinal symptoms went away, and frequent examinations of the lungs and sputum showed that the disease was slowly receding. Concerning this case the reporter says: "The physical changes, the clinical history, and the presence of bacilli in numbers prove that it was an undoubted case of pulmonary tuberculosis. It is equally certain that a sudden attack of facial erysipelas, preceded by an acute tonsilitis, warded off the fatal termination which was seemingly not far off, by abruptly cutting short the indications of lung disease."

Whether such cases are to be looked upon as some of the curiosities of medicine, or whether the suggestions they offer can be put to any practital use, are points that remain for the future to determine.

SYRUP OF HYDRIODIC ACID IN ASTHMA.

In the *Medical Bulletin* for September is an interesting article by Dr. A. E. Norton, of Philadelphia, on the advantages of hydriodic acid in the treatment of asthma. He thinks that a larger percentage of asthmatic cases would be benefited by treatment if more attention were paid to the source of irritation, whether from dust, climatic influence, syphilitic taint, heredity, etc. In treatment two great principles should be borne in mind: first, to avoid or remove the exciting cause, and second, to allay or prevent the spasm. When heredity is the predisposing cause there is usually faulty development of the lung-structure, which should be corrected as much as possible by proper gymnastic exercise to develop the chest-structure. Other cases, due to climate,

idiosyncrasy, the inhalation of irritating dust or vapors, must be dealt with according to the cause. Another class of cases are those in which the disease may be fairly ascribed to the inheritance of a gouty or specific diathesis, to which may be added those in which the causation cannot be positively determined; these are most frequently benefited by either iodides, mercurials, or arsenical preparations. To Dr. Norton it has seemed that the best results were obtained from the iodine treatment, and it is to the best methods of administering iodine that he calls attention. Potassium iodide does not usually afford much relief unless administered in quite large doses, which promote nausea, anorexia, and general gastric irritability, due to the liberation of potassium. To avoid these evils he has for several years employed hydriodic acid in syrup form, by the liberal but discriminating use of which he has obtained better results than have attended the use of any other remedy in his hands. Among the advantages offered by the syrup of hydriodic acid are its acceptable taste, freedom from irritation, and its greater energy, promptness, and certainty of action. These advantages have been verified in a number of cases, and he has learned to rely on the drug in this, as well as in other diseases. The syrup may be given in teaspoonful doses, frequently repeated at first, and its prophylactic use may be continued sor some time after the more urgent symptoms have subsided. It has acted very effectively in a wide range of cases, both of short duration and of long standing, and its effectiveness would seem to warrant its more widespread use.

The Value of Antipyresis.

It is an undeniable fact that the general estimate of the value of the antipyretic treatment of fever is sinking from year to year. Liebermeister, Brand, von Zeimssen, Vogel and others have fought against this tendency, and in a recent article by L. Riess, in *Arch. f. klin. Med.* (*Deutsch. Med. Zeit.*), also aims to uphold the value of antipyretic treatment.

The technique of Riess' method consists in putting the patient in a bath of about 88° F., whenever the rectal temperature exceeds 102°, and keeping him there until his temperature is 100° or less. If the temperature does not come down readily, or rises while in the bath, the water of the bath is gradually cooled down to 72° F., or some antipyretic (preferably antipyrin) is administered internally in a moderate dose. 809 consecutive cases of typhoid fever were treated after this fashion at the Friedrichshain Hospital from 1880 to 1886; the mortality was 69, or 8.5%, whereas the mortality in previous years under other treatment had exceeded 10%. The figures given may be better appreciated if it is realized that repeated dangerous epidemics of typhoid fever occurred during the latter period. The direct causes of death in some of these were: In 12 cases, pneumonia; in 12, troubles about the neck; in 3, purulent pleuritis; in 12, perforative peritonitis; in 4, intestinal hæmorrhages; in fact, among all the fatal cases there were but 10 of uncomplicated typhoid, and most of these came under treatment late in the disease.

Riess believes that antipyretic treatment shortens the duration of the disease; the average duration of the disease in those coming under treatment before the sixth day was 15½ days, and of those coming in after the sixth day was 19.9 days.

As regards the effects of the baths upon the typhoid symptoms, head symptoms gave way during the first immersion, and two or three days sufficed for the complete disappearance of the typhoid state. The pulse, as a rule gained in strength during the bath, usually becoming slower at the same time. In no case was a previously existing bronchitis made worse by baths; if the patient was seen early in the disease the bronchitis generally failed to appear. Existing diarrhœas were moderated, and profuse diarrhœas did not occur.

The number of complications was very small; of intestinal hæmorrhages, there were 21, or 2.6%; furuncles (28 cases, or 3.4%) and subcutaneous abscesses (13 cases, or 1.6%) may, in part, be ascribed to the baths. The kidneys were involved in but 3 cases. The disease recurred, for a short period only, in 21 cases, or 2.6%.

The view that the mortality of typhoid has decreased of late years because the disease has appeared in a milder form, is vigorously combated by the author, who points to the severe complications, and to the low condition of many of the patients on entering the hospital.

Riess also obtained good results by this method in about 80 case of pneumonia, and in scarlatina, erysipelas, typhus, recurrent and puerperal fever, etc.

We cannot explain the action of the permanent baths by saying, as in the case of the cold baths, that there is an irritation of the cutaneous nerves and a consequent action upon the cutaneous blood-vessels; the chief action is here the long-continued cooling-off of the blood and the various organs, especially the brain.

Riess closes his essay by saying that "a giving up of antipyretic methods must be regarded as a most deplorable step backward in the treatment of acute infectious diseases," with which most physicians will agree.

MEDICAL ITEMS.

Methylene Blue is said to be a cheaper and better analgesic than antipyrine. It can be administered hypodermically.

Important—If True.—A chiropodist announces that he has removed corns from several of the crowned heads of Europe.

Further Report on Pyoctanin.—A denial has been made by an efficient German investigator, of the remarkable germicidal capabilities claimed for pyoctanin.

We recently prescribed it in a case of gonorrhœa in 1:1,000 solution, as recommended by Dr. Kanne, but failed to derive any benefit from it.

A Child-Birth at 12 Years of Age.—Dr. E. B. Wales, of Cold Spring, N. J., reports in the *Med. and Surg. Rep.* such a case in a colored girl. Labor was easy, and the young mother had a fine flow of milk sub sequently.

Starchy Foods for Invalids.—The digestibility of starch is greatly increased by prolonged cooking, says Dr. N. Butiagin, and since the ptyalin value of saliva is diminished by disease, starchy fooods for invalids should be well boiled, in his opinion, three or four times as long as ordinarily.

The Horrors of the Kemmler Execution are said, on the authority of those who were witnesses, to have been mainly in the reporters' minds. To revenge themselves on the warden of the prison for his refusing to give them the details for publication, they conspired to "roast him" as well as poor Kemmler, in writing up the harrowing accounts which appeared in the dailies.

Gun Wa, the ubiquitous washee-washee Chinaman, who has been posing as the Great Oriental Healer, and gathering in the shekels of the gullible portion of humanity of many cities at the same time, has been prosecuted in Milwaukee, and has plead guilty to the charge of conspiracy to defraud. The same combination has already been driven from Denver. They will now 'move on to the next corner.'

Amylene Hydrate in Epilepsy.—Nache agrees with Wildermuth as to the value of amylene hydrate in epilepsy, even where bromides have failed, and where the attacks are not only very frequent but severe. He uses a 10% solution of the drug, and gives from one to two tablespoonfuls a day (from 30 to 90 grains). Nache also believes that *petit mal* and nocturnal epilepsy are benefited by the drug.—*Med. News.*

A Cure for Cholera.—An infusion made from the refuse of malted barley is a fluid in which all kinds of microbes usually thrive, but M. G. Roux has observed that the Koch cholera microbe will not grow in this infusion, and cholera microbes immersed in it are quickly killed, says the *Phys. and Surg.* He therefore suggests to the Societe des Sciences Medicales of Lyons, that the infusion might be useful in cholera.

Chrysophanic Acid in Acne.—Dr. Metcalf highly recommends this agent in acne. He says he has not failed to cure perfectly any case in which the treatment has been adopted. The face is to be washed with soap and well dried, at night. Before retiring, the parts in which the acne is, are to be well rubbed with an ointment of 3 grains of the acid to the ounce of vaseline, and this is repeated nightly until a sharp inflammation of the skin ensues. The inunction is then omitted till the dermatitis is gone, when it is reapeated. In most cases a 3 grain ointment is of sufficient strength, but occasionally the strength is to be increased up to 5 grains to the ounce, or even more. The patients are to be cautioned about the staining of their fingers and clothes and to guard their eyes.—*Can. Lancet.*

Bromide of Ethyl as an Anæsthetic.—"Dr. Thomas Frank, of Torontal-Szegcsany, in Hungary, has employed, it is stated, with great success the inhalation of bromide of ethyl for anæsthetic during operations on the mouth. In one case the patient, though he felt no pain during the removal of a sarcomatous epulis, did not entirely lose consciousness, as he spat some blood when requested to do so, and when at the commencement the breathing stopped, he resumed it in reply to directions."—*Lancet,*

A Generous Gift.—The Indiana Medical College was recognized August 5, in receiving a gift of $100,000 from Dr. William Lomax, of Marion, Ind. The doctor originally desired to make this gift through DePauw University, letting the college become a part of this institution, but for some reason the University would not agree to the terms, and he then made the gift to the college direct. He encumbers the gift only to the extent of an annuity of $1,200 to himself and wife as long as either shall live.—*Com. Gaz.*

Nervous Derangements After Castration.—In the *Wiener medicinische Presse* Dr. Weiss relates the case of a man, æt. 48 years, both of whose testicle were removed for tubercular disease. The operation was shortly followed by certain psychical and nervous derangements, some of which lasted for six years. The attacks were generally preceded by an aura of a sensation of oppression, and consisted of flashes of heat about the head and trunk, accompained with profuse sweating. At the same time there were neurasthenic phenomena, such as headache, vertigo, palpitation, and melancholy, and the memory and the will were notably enfeebled. After a short time there were attacks of gastro-intestinal neuralgia. The author likens these troubles to those observed after oophorectomy or in connection with the menopause. It is to be noted that the patient was of neurotic antecedents of an hereditary nature.—*N. Y. Med. Jour.*

Faster and Faster.—Tanner, the forty-day faster, has a rival in the person of Signor Giovani Succi, who lately arrived from London, coming with the express purpose of beating the forty-day record of our countryman. He intends abstaining from all edibles for 45 days. With him he has brought a trunk full of documents to prove that he is the real Succi, among them volumes bound in red and black morocco with the signatures of 200 or more physicians who watched his first

fast in Milan, records of the observations of Paris physicians, and scrap books filled with accounts of his accomplishments in Italian, Spanish, French and English. Succi fasted 30 days in Lisbon, 55 days in Brussels and 40 days in London. He has gold medals from the Paris exposition, with his profile in bas relief. The faster is a man of medium size, and his flesh is as hard as iron, while he is of an extremely nervous organization. The force that sustains him, he says, is spiritual force, and after a few days of fasting he can take up the foils and vanquish the best fencers.

Two Men Killed with One Ball.—At Gatesville, a small town just west of Waco, Texas, an extraordinary killing occurred recently. In a saloon a quarrel occurred between three or four young men; one of them, Lee Basham, raised a glass to throw at Vogel, who dodged down behind the counter.

Basham resisted the efforts of his brother in-law, John Wilkie, to restrain him, and, leaning over the counter, threw the glass at Vogel, who raised up with a Colt revolver in his hand. Basham ducked down and Wilkie sheltered himself behind him, just as Vogel fired. The ball struck Basham in the throat on the right side, just above the collar bone, and went entirely through his body, coming out just above the left hip, entered the forehead of Wilkie, went through, coming out at the back and struck with such force that it stuck in the wall. Both men were killed.

New Remedy for Pediculi Pubis.—The treatment of pediculi pubis by the usual blue ointment has so many inconveniences with its disagreeable application and its toxic after-effects, that the use of the well-known antiparasitic action of salicylic acid has of late been much extolled. The formula is:

℞	Salicylic acid, - -	2 to 3 parts.
	Aromatic vinegar, - -	25 "
	Alcohol, 80%, - - -	72 "

The parts are to be rubbed with a piece of flannel wet with the mixture. One application is usually sufficient. Sulpho-calcine is also excellent in this trouble, as well as innocent of any irritation in its application.—*Kansas Med. Jour.*

According to *La Medecine moderne,* M. Brocq uses a solution of one part of corrosive sublimate in 500 parts of vinegar as a lotion for destroying crab-lice. It is said that it not only kills the pediculi, but also detaches the nits.

Another Mind-Reader.—Bishop, too, is in danger of losing the prestige of being the pre-eminent mind-reader of this rapid age. P. Alexander Johnstone, whose peculiar powers have of late mystified many Chicagoans, recently performed successfully the great feat of finding in a hotel register a name which had previously been determined on by a committee. It was following an attempt to do this that Bishop lost his life.

The committee drove in a hack from the Auditorium Hotel to the Grand Pacific Hotel by a difficult route, and, going to the hotel register, selected a name. Leaving one committeeman, Mr. Charles Lederer, in charge of the register, they returned to the Auditorium, where Johnstone had remained in custody of one of the committeemen, so that there could be no possible apparent chance of collusion. They bandaged Johnstone's eyes securely. The sequel was astonishing. Johnstone instantly rushed down to the carriage and drove blindfolded to the Grand Pacific, avoiding cable cars and thousands of vehicles on the way, rushed to the register, turned the leaves rapidly, found the name and repeated it, giving number of page and date of month. Johnstone, on his way home from the hotel, was taken with a severe chill, which threw him into a cataleptic fit. His friends at first pronounced him dead, but after working over him for two hours life was again perceptible.

BOOKS AND PAMPHLETS RECEIVED.

Copies of these reprints may be had on application to the authors. The books are for sale by J. H. Chambers & Co., 914 Locust St., St. Louis.

A Text-Book of Practical Therapeutics, with especial reference to the Application of Remedial Measures to Disease and their Employment upon a Rational Basis. By Hobart Amory Hare, M.D., (Univ. of Pa.,) B. Sc., Clinical Professor of the Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania, etc. Philadelphia: Lea Brothers & Co. 1890.

Spinal Surgery. A Report of Eight Cases. By Robert Abbe, M.D., Surgeon to St. Luke's Hospital, New York. Reprint from "Medical Record."

Wood's Medical and Surgical Monographs, Vol. 7, No. 2, August, 1890. Containing:

I. Morbid Blushing; Its Pathology and Treatment. By Henry Campbell, M.D.

II. Alcoholism in Women. By Dr. Thomeuf, Paris.

III. The Different Methods of Lifting and Carrying the Sick and Injured. By Geo. H. Darwin, M.D.

IV. Treatment of Ingrowing Toe-Nail. By Joseph Amiard, M.D.

V. Chronic Bronchitis and Its Treatment. By Wm. Murrell, M.D.

Wm. Wood & Co., Publishers, 58 Lafayette Place, New York. Monthly, $10 a year; single copies, $1.

A Treatise on Headache and Neuralgia, Including Spinal Irritation, and a Disquisition on Normal and Morbid Sleep. By J. Leonard Corning, A.M., M.D., Consultant in Nervous Diseases to St. Franccis Hospital. With an appendix on Eye Strain, a Cause of Headache. By David Webster, M. D. Second Edition. New York: E. B. Treat, 5 Cooper Union. 1890.

Menstruation and the Removal of Both Ovaries. By George J. Engelmann, A.M., M.D., St. Louis.

Gastro Enterostomy and Pylorectomy. By H. Tuholske, M.D., Professor of Surgical Pathology and Clinical Surgery in Missouri Medical College; Consulting Surgeon to the St. Louis City Hospital, etc. Reprint from "Medical News."

Proceedings of the First Annual Meeting of the Tri-State Medical Association of Alabama, Georgia and Tennessee, held in Chattanooga, Tenn., October 15 and 16, 1889.

The Physician's Companion, A Pocket Reference Book for Physicians and Students. By C. A. Bryce, M.D. Pp. 164. Cloth, $1. Leather, (especially for the pocket) $1.25. Richmond, Va.: The Southern Clinic. 1890.

The Hystero-Neuroses, with especial reference to the Menstrual Hystero-Neuroses of the Stomach. By Geo. J. Engelmann, A.M., M.D., St. Louis.

I. Case of Corneal Transplantation from the Rabbit's to the Human Eye.

II. A Singular Case of Injury. By Wm. F. Smith, M.D., Chicago, Ill.

Darwinism and Politics. By David G. Ritchie, M.A. Administrative Nihilism. By Thomas H. Huxley, F.R.S. Price, 15 cents. New York: Humboldt Publishing Co.

Annual of the Universal Medical Sciences: A Yearly Report of the Progress of the General Sanitary Sciences Throughout the World. Edited by Charles E. Sajous, M.D., and Seventy Associate Editors. 1890. F. A. Davis. Philadelphia.

Transactions of the American Dermatological Association at its Thirteenth Annual Meeting, held at Boston, Sept. 17-19, 1889. Heo. H. Tilden, M.D., Secretary.

Essentials of Anatomy and Manual of Practical Dissection, together with the Anatomy of the Viscera. Prepared especially for Students of Medicine. By Charles B. Nancrede, M.D., Professor ef Surgery and of Clinical Surgery in the University of Michigan, Ann Arbor, etc. Philadelphia: W. B. Saunders, 913 Walnut St.

Quintessence of Socialism. By Professor A. Schaffle. Translated by Bernard Bosanquet, M. A. New York: Humboldt Publishing Co. Price, 15 cents.

Physiognomy and Expression. By Paola Mantegazza. Illustrated. In two volumes. New York: Humboldt Publishing Co. Price, 30 cents.

What is the Present Medico-Legal Status of the Abdominal Surgeon? By Wm. Warren Potter, M.D., Buffalo, N. Y.

Cassel & Co's. Trade Catalogue. LaBelle Sauvage, Ludgate Hill, London.

Twenty-Ninth Annual Report of the Cincinnati Hospital.

Researches in Electro-Allotropic Physiology; Uses of Different Qualities of Electricity to Cure Disease. By Jerome Kidder, M.D., 820 Broadway. New York: Jerome Kidder M'f'g. Co.

An Explanation of the Phenomena of Immunity and Contagion, based upon the action of Physical and Biological Laws. By J. W. McLaughlin, M.D., Austin, Tex. 1890.

Prospectus and Catalogue of the St. Louis College of Pharmacy, 412 and 414 S. Sixth St. Twenty-Fifth Annual Session from October, 1890 to March, 1891.

LITERARY NOTES.

Darwinism and Politics.—By David G. Ritchie, M. A., Fellow and Tutor of Jesus College, Oxford.—To which is added Administrative Nihilism. By Prof. Thomas Henry Huxley, F.R.S. Paper, 15 cents. The Humboldt Publishing Co., 28 Lafayette Place, New York.

In his able essay, Mr. Ritchie contends that the phrase "survival of the fittest" is very apt to mislead, for it suggests the fittest or best in every sense, or in the highest sense, whereas it only means, as Prof. Huxley has pointed out, "those best fitted to cope with their circumstances."

The publication of Prof. Huxley's "Administrative Nihilism" is well timed, and fits in with the preceding essay. The two essays form a very interesting number of the "Humboldt Library of Science."

CORRESPONDENCE.

Editor Review.—As I have received many inquiries regarding my lecture on "Sexual Perversion" announced in your valuable journal, please announce that I shall be pleased to send a copy to any physician who will enclose stamp for same. Yours, etc.,

G. Frank Lydston, M.D.

Opera House Block, Chicago, Ill.

SOCIETY PROCEEDINGS.

TRANSACTIONS OF THE GYNÆCOLOGICAL SOCIETY OF CHICAGO.

Regular meeting, April 18, 1890. The President, James H. Etheridge, in the chair.

[CONCLUDED.]

Dr. Byford.—Mr. President: The paper was so complete, and confines itself so well to the subject, that it is hard to criticise it in any way except to commend.

In regard to the after effects of ether, I have had a little experience in one way—that is, after long operation—and I have noticed that a patient who has been under ether two or three hours is not apt to vomit much. I think it is very much like giving a small and

large dose of morphine: if you give some women one-sixth to one-fourth of a grain there will be nausea, but if you give them a large dose they will often go to sleep and sleep it off. Very often by giving a full narcotic dose when the patient is coming out of the ether we can prevent nausea. I have had some cases of most excessive vomiting cured by giving something to destroy the reflex sensibility, viz., about sixty to eighty grains of chloral per rectum in divided doses (twenty grains every two or three hours), or large hypodermics of morphia. I have not gotten any benefits from cathartics except in establishing the continuity, one might say, of peristaltic action. If the patient vomits and the bowels are in such a condition that peristaltic action does not go on properly, I think cathartics will very often give relief. Often when I see symptoms like that coming on, I give an enema of turpentine, glycerin and water, and what seems like developing sepsis disappears.

In regard to taking out drainage tubes, I can hardly agree with the doctor. Local abscesses have occurred from removing the drainage tube too soon. When we put in a tube it is possible that the peritoneal cavity may not be shut off after 24 hours, or an accumulation of fluid near the drainage tube may be forced into it after two or three days. Nor can I agree with the principle of taking out the stitches in six days; I think it sometimes dangerous. I have two cases now in which the stitches have been left in two weeks, although I sometimes take half of them out in less time than that. I use silkworm gut. I have twice opened the abdominal cavity for septic inflammation and once for peritonitis. In each case the patient died promptly in a few hours, which led me to think the abdomen should be opened early, and that we should not wait until sepsis has fully developed.

If we leave any extensive surfaces of denuded intestine, the use of cathartics is thought to limit adhesions; but I believe that wherever the peritoneum is abraded there will be adhesions anyhow and in proportion to the injury. Cathartics cannot prevent them. I give myself no concern about adhesions alone, because I have seen all the intestines glued together from peritonitis and no trouble whatever result. But if viscera are glued together in such a way as to interfere with their function, there will be trouble. I do not think there is so much in preventing adhesions as in having these adhesions occur when the intestines are in a proper position to perform their function. For this purpose I give cathartics, and give them early, and after the bowels have moved keep them quiet.

Dr. H. P. Newman.—Mr. President: The subject has been thoroughly discussed, and possibly I cannot say anything further of interest other than to give a few details as to the method used at St. Elizabeth Hospital. First, in regard to the stomach: I am in the habit of giving lime-water and milk in small but frequently repeated doses—say a teaspoonful to a tablespoonful as often as every two or three minutes—until larger quantities can be taken at long intervals. Given in this way, it is a valuable agent in allaying thirst, correcting acidity, checking vomiting, affording nutrition, and restoring the loss of fluids. For the latter purpose saline injections per rectum are more prompt in their action, and when indicated are frequently resorted to. Another method in use at the Hospital is the rubber, or Esmarch's, bandage applied over the usual dressings. It allows of mobility of the abdomen and respiratory tract, and is a very great comfort to the patient when not applied too tight, but sufficiently so as to afford some support. This device was first used by Dr. J. Frank at the Hospital, and I believe is deserving of special mention, inasmuch as it keeps up an admirable uniform support and warmth of the parts—the latter often a relief to the usual abdominal distress, so that an opiate becomes unnecessary; and the former of great value, especially in those cases of severe retching and vomiting.

The iodoform wicking I think has advantages over the usual gauze for capillary drainage. The shreds, as you know, are continuous and not apt to be broken or interrupted like gauze; it can be passed into the ordinary glass or rubber drainage tube, as well as used to advantage after the removal of the tube.

In regard to the use of the catheter after laparotomies or any surgical procedure, I was pleased to hear the fact spoken of that one can, with a little patience, get along without the catheter in many instances, certainly to the great advantage of both patient and attendant. Usually the use of the catheter must be delegated to a nurse or attendant, and unless great care is taken, both as to cleanliness and the use of the instrument, an irritability of the urethra, neck of the bladder, or possibly cystitis, results, which is not only annoying to the physician, but entails suffering upon the patient, and leaving a trouble that is apt to be extremely tedious in its after-treatment.

In regard to the injections into the bowel referred to, there seems to be one valid objection to them—they are apt to create an intolerance on the part of the rectum, and where used early may prevent that which is of greater importance later on, the nourishment of the patient per rectum with whiskey, milk, etc.—our "sheet anchor" in after-failure from sepsis and other causes.

Dr. Parkes.—I would like to say one word about ether. It has been the anæsthetic I have used universally in all cases of laparotomy. I think there is a great point in the manner of its administration and the inhaler that is used. I am surprised at the very small amount of ether required to keep a patient asleep by means of the ordinary hospital inhaler. It is a rule with me to advise the anæsthetiser not to keep the patient profoundly asleep, but to remove the ether occasionally and let the patient have as much air as possible and get along with as little ether as possible. The after-effects depend upon the peculiarites of the patient as to its influence upon vomiting. I cannot say that I have ever used any remedy that I have been satisfied

was of great service in relieving vomiting. By mistake I once used a remedy that stopped persistent vomiting instantly. The patient was given a teaspoonful of 2½% carbolic acid.

I am a very strong advocate of the non use of the catheter. I do not think it ought to be used at all. I think it is a good idea in the preparatory treatment to teach the patient to use the bedpan. The greatest difficulty arises from not paying attention to that. I am quite sure the use of the catheter has annoyed many patients a good deal. I do not believe in keeping the patient absolutely quiet; I allow my patients to move about, and tell the nurse to move them. I do not think the wound itself nor any of the complications in the abdomen are disturbed to any harmful degree by the slight changes of position which give such comfort to the patient.

I am glad Dr. Jaggard raised the point of keeping the patient in bed for some time after the operation. I have had a similar experience to his, but not so bad in its results, still one in which the patient was placed in danger by getting out of bed in the second week, and I have had patients in a very short time develop an attack of peritonitis from the same cause. I do not allow the patient to even assume a sitting posture until the end of the third week, no mattter how well she has done.

Let me say one word about after-treatment: I believe it is best for us to come to the conclusion that no after-treatment is required.

Dr. T. J. Watkins, in closing the discussion, said: Mr. President: With reference to the time of removal of the drainage tube, I still adhere to its early removal as suggested in my paper, for if a sufficient amount of fluid remain connected with the tubes at the time of its removal to interfere with the recovery of the patient, it will well up through the sinus; then by keeping the sinus patent just through the abdominal wall, it will heal in a most scientific and satisfactory manner. If the fluid be not connectedwith the sinus, allowing the tube to remain *in situ* will do no good, but will produce constant irritation.

I have often removed the drainage tube earlier than I thought wise, but as I had observed in a number of cases that sinuses followed the prolonged use of the tube, I took the chances, and in none of these cases did the wound do badly. To allow a sinus,not connected with a suppurating sac, to heal from the bottom by frequent shortening of the tube, seems to me absurd, for the walls of the sinus are so contractile that the sinus will readily close unless prevented. It is necessary, then, to keep the sinus open only just through the abdominal wall, and for a short time.

The time of removal of the stitches is, I think, a matter of rather slight importance: if the wound does well there is no reason why the stitches should not remain *in situ* more than one week, if desirable; but if the incision be short and the union perfect, there is no reason why the stitches should not be removed at the end of a week.

I am unable to see any reason for the opinion expressed that etherization does not produce nephritic congestion. No one doubts that ether is eliminated by the kidneys, and that when given in small amounts it has an active diuretic effect. It is, moreover, a therapeutic fact that all active diuretics, when given in excess, produce nephritic congestions. Scanty secretion of urine, pain in the region of the kidneys, nausea and cephalalgia not infrequently follow etherization, and these symptoms are usually relieved by increasing the functional activity of the kidneys.

The danger from hypodermics of ether is not septic infection, but local paralysis.

The cases cited by Drs. Parkes and Jaggard, in which too early getting up after laparotomy proved fatal, present many points of interest. A number of cases are on record in which, after the patient has done well for one, two, or three weeks following laparotomy, peritonitis and septicæmia have suddenly developed with a fatal result. In such cases the autopsy has usually demonstrated that death was due to the rupture of a pus sac. In the cases cited it might be interesting to inquire first: Were they not of this nature? and second: How would the patients have had they remained longer in bed?

In the matter of abdominal support I consider the device of Dr. Newman as practicable and worthy of thorough trial. I think, however, that the use of an abdominal support for many weeks or months after laparotomy is bad practice, as it causes atrophy of the abdominal muscles and thus increases the liability to hernia. The late Dr. James B. Hunter was one of the first to abandon the abdominal supporter. As soon as the wound was healed he gave the abdominal walls the rough massage, and in none of his cases, as far as I know, did the distressing feeling of weakness of the abdominal walls, so commonly noticed after the prolonged use of the supporter, occur, or hernia result.

I think the question of the kind of ether inhaler to be used is most important. The Clover inhaler is theoretically bad, but practically it works well. When properly used, not more than two ounces of ether are necessary for the first hour, and frequently one ounce suffices for an operation. The liability to vomiting is much lessened when little ether is used, and necessarily congestion of the kidneys and air passages is much less frequent.

I thank the Fellows of the Society for their kind attention to, and discussion of, the paper.

SOCIETY NEWS.

AUSTIN DISTRICT MEDICAL SOCIETY.

The Twelfth Quarterly Meeting of the Austin District Medical Society, will be held at Austin, Texas, Thursday, September 25, 15, 1890. F. R. Martin, M.D.,

Kyle, President, T. J. Bennett, M.D., Austin, Secretary and Treasurer.

PROGRAMME.

MORNING SESSION.

1. Reading of Minutes.
2. Applications for Membership.
3. Report of Hall Committee.
4. "A Case of Traumatic Tetanus," by S. G. Harper, M.D.,; Discussion by J. O. Lewright, M.D., and W. A. Ellison, M.D.
5. "Some of the Delusions of the Insane," by John Preston, M.D.; Discussion opened by A. N. Denton, M.D., and F. A. Maxwell, M.D.

AFTERNOON SESSION.

6. "The Treatment of Epithelioma of Face by Caustics," by A. C. Conner, M.D.; Discussion opened by W. M. Cunningham, M.D., and T. D. Wooten, M.D.
7. "Antipyretics," by R. S. Gregg, M.D.; Discussion opened by J. W. McLaughlin, M.D., and C. O. Weller, M.D.
8. "Eclampsia," by R. Atkinson, M.D.; Discussion by R. M. Swearingen, M.D., and Ralph Steiner, M.D.
9. President's Address.
10. Reports of Cases.
11. Unfinished Business.
12. New Business.
13. Election of Officers, as follows: A President, two Vice-Presidents and two Censors to take the place of Drs. Swearingen and Preston, whose terms expire.

TRI STATE MEDICAL ASSOCIATION of Alabama, Georgia and Tennessee will hold its next meeting in Chattanooga, Tuesday, October 14, 1890, and will continue in session two or three days.

At our first meeting sections of the various departments of the medical sciences were created, with the following chairs:

Surgery—G. A. Baxter, Chattanooga.
Gynæcology—R. J. Trippe, Chattanooga.
Obstetrics—W. T. Blackford, Graysville, Ga.
State Medicine—P. D. Sims, Chattanooga.
Physiology—W. L. Gahagan, Chattanooga.
Otology—R. D. Boyd, Chattanooga.
Ophthalmology—N. C. Steele, Chattanooga.
Laryngology—Max Thorner, Cincinnati, O.
Psychical Research—J. E. Purden, Cullman, Ala.
Pathology and Practical Microscopy—James E. Reeves, Chattanooga.
Meteorology—E. T. Camp, Gadsden, Ala.
Practice—G. W. Drake, Chatanooga.
Materia Medica and New Remedies—Junius F. Lynch, Sanford, Fla.

The objects of our Association are the encouragement of all that pertains to the elevation of the profession, and the furtherance of all measures for the relief of suffering. We aim to draw together those who respect ethical medicine for mutual acquaintance, for advancement in knowledge, and for stimulation to scientific investigation.

Our membership is not restricted to the three states, and all who can should join us in the furtherance of the above objects. By furnishing proper credentials and remitting one dollar to the secretary, any physician may be enrolled as a member of this Association.

In due time a circular will be issued, giving full particulars of our next meeting, but at present we feel warranted in promising reduced rates on railroads and at the hotels.

The names of firms who apply for space to make exhibits of pharmaceutical preparations, surgical instruments or other articles, will be published in our next circular. We are already assured of a large number of exhibits.

Dr. J. R. Rathmell,
Dr. W. C. Townes,
Dr. W. L. Gahagan,
Executive Committee.

Address all communications to the secretary of the Association.

THE NEW YORK ACADEMY OF MEDICINE, 12 West 31st Street, New York City, has removed to 17, 19 and 21 West 43d Street, New York City.

SELECTIONS.

LITHIA AND MINERAL WATERS.

There is a fashion in mineral waters as in most other things and at the present time lithia waters occupy a prominent place," says Dr. A. C. Peale, of the U. S. Geological Survey, in his "Classification of American Mineral Waters," published in May, 1887, and no doubt he is correct, for whenever of late a "recently discovered" spring has been brought to public notice, lithia is invariably mentioned among its constituents, and in most instances "the fact that the water contains lithia, if only a trace, is made prominent by the incorporation of lithia into the name or designation of the spring."

Although lithia was discovered as long ago as 1817 by the Swede Arfvedson, its employment in therapeutics is of recent origin. The first mention that was made of it in this connection was in the *Pharmaceutical Journal* for 1843, in a paper by Dr. Alexander Ure, who found that "a urinary calculus composed of alternate layers of uric acid and oxalate of lime, when placed in a solution of 4 grs. lithium carbonate in one ounce of water and steadily maintained at a blood heat during 5 consecutive hours, lost 5 grains in weight. The difficulty of procuring the salt prevented the pursuance of the inquiries."

Dr. A. B. Garrod, the renowned author of the "Treatise on Gout and Rheumatic Gout," entered upon its

medicinal use in 1858 and "was much gratified at the results." But the great bar to the free use of lithium salts in medicine has been their expense" (Gout and Rheumatic Gout, p. 369). However, since by means of spectral analysis Bunsen and Kirchhoff demonstrated its extensive diffusion throughout nature, especially as a constituent of the primary rocks, a fresh impetus has been given to the discovery of new sources, and at present it is being supplied from the vast deposits of lepidolite in Saxony and Bohemia at comparative low prices.

"To the exhaustive experiments of Dr. Garrod, more than to any other individual, are due the knowledge of the therapeutic properties of the lithium salts and the favor with which they were at once received by the medical profession generally." "The good results obtained by their use have been persistent, and they have not only maintained the excellent impression which they first produced, but have continued to win a well-deserved reputation for certainty of action in a wide and constantly increasing field of therapeutics."

"Lithia is by far the most powerful antacid of all the alkalies, which is one reason for its rapid action upon abnormal accumulations of uric acid or the urates in the blood; another being the fact that unlike the other alkalies, it forms a soluble salt with that acid. It dissolves in about 60 parts, while the sodium salt requires 1200 parts of water" (Dictionary of Solubilities by Fr. H. Storer, p. 701).

"The salts of lithia should be given in a freely diluted state, like all salines, either in a large quantity of plain water or, which is preferable, in carbonated water, forming *effervescent lithia water*, and corresponding, except in strength, with the soda and potash waters now in general use. Although many of my patients have continued the use of lithia salts in such form for a long time, I have never been able to detect any really injurious effect" (Gout and Rheumatic Gout, pp. 368 and 371).

It is to these qualities and the wide-spread knowledge of them caused by the innumerable 'papers' and 'circulars' issued within the past fifteen years by interested parties, that is probably due an impression which I find all but universal among practitioners and the laity, viz: that all mineral waters of which lithia is a constituent, no matter in how trifling a degree, *must* have a paramount effect upon the uric acid diathesis."

In the "Lists and Analyses of the Mineral Waters of the United States," by Dr. A. C. Peale, there are not more than fifteen springs mentioned which contain upwards of 4 grains of lithium bicarbonate to the gallon of water; most of the so called "lithia waters" exhibiting but traces of it in their analysis, and others again seem to lose even that during the bottling of the water. There is, however, one spring in Europe, the Murquelle at Baden-Baden, which, according to Bunsen, contains as much as 22.5 grains of lithium chloride to the gallon; but Dr. Rueff, the attendant physician, when prescribing this water to patients who needed a stronger dose, was in the habit of adding to the water an amount of lithia equal to that of the chloride contained therein, thus administering to the patient a double dose of lithia salts.

"This proceeding recommends itself to every practical and reflecting physician," and now I may be permitted to continue and close with the words of Dr. F. L. James in his able article on "Lithium in Mineral Waters," published in the *St. Louis Medical and Surgical Journal*, July, 1889, from which I have drawn already above with his consent:

"In prescribing carbonate of lithium it is necessary to remember that it is not very soluble, and that it requires 100 parts of pure water for its complete solution at ordinary temperatures. This difficulty is easily overcome, however, if carbonated water be used, and not only is the solubility of the salt greatly enhanced but it is put into a form in which its therapeutic activity is increased, to say nothing of the generally more agreeable flavor of carbonated waters. The beneficial effects of lithium carbonate in such solution have been too frequently experienced by me, not only in my practice, but in my own person in the treatment of arthritis and rheumatism for me to need authority for its use, but if such were wanting I could make reference to the writings and experiences of some of the most eminent practitioners of the past half century.

"Since physiological chemistry has demonstrated that in gout there is an abnormal formation of sodium urate in the system and that the deposition of this is constantly effected in the joints and tissues during the tortures of the paroxysms of the disease, which are particularly referred to under the name of 'gout,' the administration of any salt of sodium which is especially liable to decomposition in the system (with the danger of formation of sodium urate) should be carefully avoided in the construction of any formula in connection with lithium carbonate. We should seek rather for such adjuvants as will form soluble combinations with uric acid.

"A trial of many formulæ in this direction has resulted in the following combination which I strongly recommend from personal experience as to its benefits:

℞	Lithium bicarbonate - -	grs. xij.
	Magnesium bicarbonate - -	grs. x.
	Potassium bicarbonate - -	grs. xvi.
	Sodium chloride - - -	grs. x.
	Carbonated water - - -	oz. xvj.

M.

This may be taken almost ad libitum.

This is almost, if not quite, identical with a water manufactured and put upon the market in this city by Dr. Enno Sander under the name of 'Garrod Spa' or Lithia-Potash water, and its effects have been all that could be desired.

PRESERVATIVES.—The use of prerservatives for articles intended for food and drink is an important one, both for the manufacturer and consumer. From a sanitary point of view, it is doubtful whether any of the preservatives ordinarily added to articles intended for human consumption ought to be encouraged. Laws exist in Continental European countries prohibiting the use of certain of these preservative agents. Salicylic acid is prohibited by most of them, and the manufacturers are there beginning the use of benzoic acid, which is a preservative in small amount and is not easy to detect. After a discussion at a convention of chemists at Speyer, Bavaria, September 10, 1888, the conclusion was reached that boric acid, as a preservative for foods, is to be regarded with caution. Sanitary authorities have generally spoken in stronger terms of the use of boric acid, and yet it enters into the composition of a large number of the preservatives in the market. Hirschohn (*Chem. Ztg. Repertor*, 1886, p. 46), gives a description of several different boro-glycerides which he recommends for preserving foods. Boro glycerine is prepared by heating glycerine with boric acid, in the proportion of 124 of the former to 190 of the latter. He also recommends sodium, calcium and magnesium glyceoborates. These compounds are mostly tasteless and quite soluble in water and alcohol.

Magnesium borate is recommended as a remedy in throat affections.

A. R. Rosen recommends the following method for preserving meats: Boric acid or its salts are dissolved in water and the solution is then frozen. The article to be preserved is then covered with this ice, with the result that the meats are preserved after the ice melts.

Dr. E. Polenske (*Kaiserlich Gesundheitsamt*, 1889, p. 198) has made an examination of ten commercial preservatives intended for meats; 3 of the 10 contained sulphurous acid or sulphites; 2 contained borax and 5 boric acid; 1 each contained alum, arsenious oxide, salicylic acid and free phosphoric acid; 2 contained glycerine, and 2 boro-glycerine; 3 contained nitre and 6 common salt. The one containing arsenious acid ($1^2/_3$ grains per quart) was sold under the name of Stuttgart Preserving Fluid, for meats. (Translated).

This was the only one actively poisonous, but several of the others were decidedly objectionble. Indeed, we should object to the addition of anything to our meats which is not a natural ingredient of food or cannot be converted into a compound natural to the human body. —E. H. Bartley, M.D., in the *Brook. Med. Jour.*

ANEURISM OF AORTA.—Powell (*Med. Sci.*) believes that the true aortic aneurism is of the sacculated variety. Fusiform aneurism bears a closer relation to the heart that the sacculated variety, and treatment in it should be given to the heart. The manifestations of the sacculated variety are always from the presence of a tumor. In making the diagnosis it is always necessary to be certain this tumor is a "vessel tumor." Mere pulsation never means aneurism. The pressure signs must always be present. In doubtful cases of abdominal aneurism chloroform is of aid in making a diagnosis. A diastolic murmur is of great importance, meaning intra-arterial disease and, if the pressure signs are present with this, there is always evidence of aneurism. Thrills are not always to be found. The effects of pressure manifest themselves by causing disturbances in the parietes, viscera, bronchial tubes, œsophagus, upper respiratory tract and vessels. Solid growths exhibit less change in signs than the aneurismal tumors. Upon auscultation a "systolic jog" is sometimes found. More important than this is the diastolic shock sound. In order that this diastolic sound may be present, the aneurism must be near the aortic arch; it must be sacculated, and there must be no marked aortic insufficiency. The laryngoscope is of value in making the diagnosis. The Tuffnell treatment is indorsed. It accomplishes three things:

1. Makes fewer the cardiac contractions.
2. Lessens the amount of blood.
3. Diminishes the blood pressure.

In this way the aneurism is not so frequently distended, the blood may become more fibrinous and the blood current is slowered, aiding coagulation. Various other methods of treatment are mentioned.

NOTE.—In addition and supplemental to the above, we give an extract from personal notes of a lecture delivered at Brompton Hospital in December, 1887, by Dr. Percy Kidd. The lecture was on "Obstruction and Stenosis of Trachea and Bronchi." In the lecture were given certain signs of new growths and aneurism. These were:

1. Enlarged superficial veins.
2. External tumor.
3. Pulsation in abnormal positions.
4. Dullness in median line.
5. Bruits.
6. Pain.
7. Paralysis of the vocal cords.
8. Unequal pupils.
9. Unequal pulses,
10. Sex (Male).

—*Brook. Med. Jour.*

ANTISEPTIC CURETTING OF THE UTERUS IN PUERPERAL ENDOMETRITIS.—Dr. E. Braun (*Arch f. Gyn.*, B. xxxvii., H. 3)—The author reviews some of the prevailing opinions with reference to the bacteriology of puerperal fever. He believes with Kehrer that three groups of germs are concerned in the etiology of child-bed fever, viz.: pyogenic, septogenic and saprogenic micro-organisms. In other words, he holds that puerperal fever may be pyæmic, septic or sapræmic. The latter or putrid form he thinks the most common.

Charpentier regards septic endometritis as the principal initial form of child-bed fever. After curetting

and douching the uterine cavity he mops it with creosote and glycerine.

Of 7,600 puerperal cases at Vienna 101 were curetted, 96 recovering. Of the five fatal cases three were considered septic rather than sapræmic.

The Vienna method is as follows: The patient is placed in the Sims position, the external genitals cleansed and the vagina and uterus irrigated with a thymol solution, before and after curetting. A finger thick iodoform pencil is dipped in tincture of iodine and left in the uterus. Vaginal tears and abrasions are touched with tinct. iodin. The cervix and vagina are lightly tamponed with iodoform gauze. The patient is given a glass of cognac and an ice bladder is applied over the abdomen. A vaginal douche of thymol solution is used once daily. The fever subsides in from one to six days. Parametric inflammation has not been observed as a result of the curetting.

Curetting is indicated when a septic condition of the endometrium is announced by fever, faulty involution and fœtid lochia. It is useless after the infection has become general.—*Brook. Med. Jour.*

The Use of Water at Meals.—Opinions differ as to the effect of the free ingestion of water at meal times, but the view most generally received is probably that it dilutes the gastric juice and so retards digestion. Apart from the fact that a moderate delay in the process is by no means a disadvantage, as Sir William Roberts has shown in his explanation of the popularity of tea and coffee, it is more than doubtful whether any such effect is in reality produced. When ingested during meals, water may do good by washing out the digested food and by exposing the undigested part more thoroughly to the action of the digestive ferments. Pepsin is a catalytic body, and a given quantity will work almost indefinitely, provided the peptones are removed, as they are formed. The good effects of water drunk freely before meals, has, however, another beneficial result—it washes away the mucous which is secreted by the mucous membrane during the intervals of repose, aud favors peristalis of the whole alimentary tract. The membrane thus cleansed is in a much better condition to receive food and convert it into soluble compounds. The accumulation of mucus is especially well marked in the morning, when the gastric walls are covered with a thick tenacious layer. Food entering the stomach at this time will become covered with this tenacious coating, which for a time protects it from the action of the gastric ferments, and so retards digestion. The tubular contracted stomach, with its puckered mucus lining and viscid contents, a normal condition in the morning before breakfast, is not suitable to receive food. Exercise before partaking of a meal stimulates the circulation of the blood and facilitates the flow of blood through the vessels. A glass of water washes out the mucus, partially distends the stomach, wakes up peristalsis and prepares the alimentary canal for the morning meal. Observation has shown that non-irritating liquids pass through the "tubular" stomach, and even if food be present they only mix with it to a slight extent. According to Dr. Leuf, who has made this subject a special study, cold water should be given to persons who have sufficient vitality to react, and hot water to others. In chronic gastric-catarrh it is extremely beneficial to drink warm or hot water before meals, and salt is said in most cases to add to the good effect produced.—*Brit. Med. Jour.*

Cassæt on the Entrance of Air Into the Veins in Tracheotomy.—Without recourse to anæsthesia, the author performed tracheotomy on a man æt. 21 years, in the third stage of pulmonary tuberculosis with laryngeal stenosis and suffocative attacks. During the operation a large vein was opened, and before it could be secured two inspirations occurred, and, judging by the characteristic hissing sounds, considerable air must have been sucked in.

The indifference of the patient permitted a complete auscultation of the heart with very interesting results.

There was heard over an area of about ten centimeters, the center of which was the tricuspid region, a very pronounced hydro-ærial bruit, a gurgling of a metallic timber synchronous with the systole. This zone appeared to increase sensibly in extent the minutes which followed the entrance of air and the commencement of the ausculation, the bubbles becoming more numerous and large. The hydro-ærial bruit became more and more limited to the tricuspid area and the bubbles diminished little by little in volume, the gurgling changing by successive stages into a fine subcrepitant rale. The bubbling disappeared after twenty-five minutes.

The dyspnœa was not intense, and the pulse, at first small, soft, and compressible, recovered itself as the gurgling disappeared.

It was at the expiration of twenty-five minutes that the patient showed some signs of asphyxia, slight cyanosis, smallness of the pulse, chilliness, sweats, and an apnœa which yielded immediately to an electrical application. The operation was then completed. A little relief followed the introduction of the canula. Three hours later the patient insisted on getting into a chair, and suddenly expired.

An autopsy revealed various tubercular lesions of the larynx, trachea and lungs and distention of the heart by a clot and distension of the arteries and veins by dark blood without froth.—*Gaz. Hebd. des Sci. Med. de Bordeaux.*

Note on the Galvano-Cautery in the Treatment of Hypertrophied Tonsils.—Chas. H. Knight, M.D., New York, in a paper read at a meeting of the Laryngological Association, two years ago, expressed the opinion that the galvano-cautery should be reserved for a comparatively small proportion of cases, including

those in which the hæmorrhagic diathesis is present or suspected, those in which vascular anomalies may be recognized, those in which anatomical conditions prevent a sufficiently complete excision of the organ, and those in which the use of a knife is positively declined. During the last two years his experience in eighteen selected cases has, on the whole, confirmed these conclusions. With regard to adults, Dr. Knight recommends that a patient above the age of 20 years be allowed his option after a fair presentation of the risks and advantages of the two methods—namely, cauterizing and cutting. In his opinion the guillotine is far preferable in children, and in those of highly nervous temperament it should be used under nitrous-oxide gas or ether, the anæsthesia with the latter not being profound. For these cases nitrous-oxide is the ideal anæsthetic. Its effect is rapid, recovery is prompt, and the period of unconsciousness is ample. Thus, much of the shock attending an excision of the tonsils may be avoided, the bleeding is not appreciably more, and the operation may be done with equal thoroughness. In older children and in adults the galvano-cautery point and knife, and more particularly the cautery-loop, are of service in the treatment of hypertrophied tonsils. The author is satisfied that the pain caused by the cautery-loop operation is not so much greater than other methods as to constitute a valid objection. Electro-puncture is in the aggregate more painful because of the frequent repetitions required, and is adapted only to cases in which for any reason the snare can not be used. By the the use of cocaine little, if anything, is gained beyond securing more complete rest for the parts, and so facilitating the adjustment of the wire loop.—*N. Y. Med. Journ.*

Spasmodic Torticollis Treated by Nerve Ligature.—A fairly healthy-looking girl, æt. 21 years, was brought to me in January, 1889. She was a well developed, intelligent girl, with a family and personal history remarkably free from any neurotic or other complaints. Her affection dated from 1883. It had gradually supervened, and culminated in a most distressing state of things, the head being so extremely rotated as to bring the left ear with sudden jerks into a line with the sternum. This took place every few seconds, not altogether ceasing, although less violent during sleep. With regard to treatment, she had been dosed with drugs innumerable, galvanized, blistered, her tonsils removed, and the galvano-cautery applied to the back of the throat without beneficial results.

I sent the case to St. Thomas' Home, and there, with Drs. Edmunds' and Sutton's valuable assistance, had little difficulty in finding the spinal accessory nerve emerging from the outer border of the sterno-mastoid muscle. Taking the nerve as a guide, I tunneled through the muscle for some distance, using a moderate amount of traction on the nerve, but avoiding injury as far as possible to the muscle. This done I placed a loop of silver wire round the nerve as high as I could reach, just twisting the ends to insure slight compression. The wound was treated in the usual way, the ends of the loop protruding. On recovering from the chloroform the spasms had entirely ceased. The wound subsequently healed by first intention, without pain or discomfort in any way.

After a fortnight the patient returned to her home in Kent. At the end of three months she visited me, still without the smallest return of the spasms, and much improved in health. Nothing seemed amiss with the sterno-mastoid or trapezius; she could rotate her head and retain it in any position. I cut off the ends of the loop as close as possible, so as to allow the skin to grow over them. I have not seen the patient since, but learn from time to time from Dr. Sutton that she remains perfectly free from a return of her troubles.—M. Collier, in the *Lancet.*

Placenta Prævia.—At the annual meeting of the North of Ireland Branch of the British Medical Association, Dr. Dempsey read the notes of a case of placenta prævia which he had treated successfully by the introduction of a large piece of alum up against the os, and maintained in close contact with it by a vaginal tampon. He claimed for it a number of advantages.

1. It produces constriction of the uterine sinuses by hardening and contracting the uterine fibres in the lower segment of the uterus, against the outer surface of which it is in contact.

2. It appears to assist in causing thrombosis of the sinuses.

3. It produces a tenacious mortar-like coagulation of the effused blood, which acts as an additional tampon in the vagina.

4. It does not prevent dilatation.

5. From the limited experience of it it appears to obviate the necessity for the usual operative measures required in placenta prævia until the os is sufficiently dilated to permit of them with safety.

In the case in point the patient was a multipara between the seventh and eighth months of pregnancy; active hæmorrhage was going on before the introduction of the alum, yet none occured afterward, though the placenta was central, and dilatation had proceded almost to the full extent. The alum had been left in for 17 hours. Immediately after its removal violent hæmorrhage again occurred, but delivery by version was easy of accomplishment without any injury to the maternal structures. Dr. Dempsey also showed a most interesting specimen of placenta prævia where abortion had taken place at the fifth month of gestation and which had been treated by the same method as the above. The placenta was centrally attached over the os in this case also, and the breech presented; but, owing to the very extensive uterine attachment of the placenta, the fœtus was born enclosed within the placenta. Only a very small portion of the amniotic membrane could be seen on one side of fætus like a small window in the

placenta. The fundal part of the placenta was the thickest and the funis was attached to this portion.—*Brit. Med. Jour.*

Nervous Symptoms Consecutive to Double Castration.—It is curious that so little should be known in respect of the nervous and physical troubles following removal of both testicles. Tradition tells us that eunuchs castrated before the advent of puberty assume certain feminine characteristics in respect both of mind and body. When the operation is performed after puberty, the corporeal changes are naturally less well marked, but the victims become irritable, melancholic, and devoid of energy and initiative. Although in Russia and elsewhere there exist sects, such as the Scopzys, who practice self-mutilation, their votaries do not afford much help in observing the effects of the deprivation, because nervous and psychical derangements may be supposed to precede the operation. Those who have to submit to the loss of the testicles for surgical reasons are by no means numerous, and they invariably withdraw from observation as soon as the wound is healed; and, moreover, the condition of their nervous system is usually masked by the predominating influence of the diathesis (often tuberculous), the local manifestations of which have necessitated the operation. In regard to females, our data are more numerous and exact. The climacteric period is well known to be associated with nervous and psychical troubles, and at this epoch the character and temperament become modified. Mental disease is frequent at this period, and the same morbid phenomena seem to result from the artificial menopause brought about by double castration. The most frequent symptoms are due to vaso-motor disturbances, which may go so far as to cause vertigo, and even simulate epilepsy. The psychical symptoms belong to the melancholic type, and not uncommonly terminate in dementia and suicide. Eleven out of thirty-three women operated upon were found by Glaevecke to have developed these symptoms. According to Brown-Sequard they are attributable to the withdrawal from the blood of secretions, the reabsorption of which usually had an activating effect on the system generally.—*Med. Press.*

Death from Tight Lacing.—Happily the practice of tight-lacing, though still a fruitful source of illness, does not now occupy a foremost place among the recognized causes of death. The fact that it does occasionally stand in this position, however, should be noted by those foolish persons whose false taste and vanity have made them the suffering devotees of a custom so injurious. It should be remembered also that, whatever may be said of the more evident effects, the indirect consequences of thus tightly girding the body cannot be exactly estimated. They cannot but be hurtful. The veriest novice in anatomy understands how by this process almost every important organ is subjected to cramping pressure, its functions interfered with, and its relations to other structures so altered as to render it, even if it were itself competent, a positive source of danger to them. Chief among the disorders thus induced are those which concern the circulation, and it is to the laboring incapacity of a heart thus imprisoned and impeded both as regards the outflow and return of blood that we must attribute such disastrous consequences as occured a few days ago in a Berlin theatre. One of the actresses, who had taken part in an evening performance, and then seemed to be perfectly well, was found next morning dead in bed. Subsequent examinatian of the body showed that death was due to syncope, and this was attributed to tight-lacing, which the deceased had practiced to an extreme degree. As regards the persons immediately affected, the warning conveyed by this incident is obvious.—*Lancet.*

Treatment of Consumption.—It is reported that Dr. W. H. Burt, of Chicago, has recently proposed hyperalimentation and the drinking of very large quantities of water as a cure for consumption.

Eight months ago, while reading of the change brought about in the obesity of Prince Bismarck through refraining from the use of water and carbohydrates, it occurred to Dr. Burt that an opposite treatment ought to result in the cure of all wasting diseases. He now states his belief that excessive eating and the excessive use of water will cure fifty per cent. of all consumptive cases in their first and second stages. He explained at length the tonic influence and power in building up tissue possessed by water, which forms three-fourths of the human body, and said that even in health six pints a day were necessary to meet the water waste, and in disease twelve pints.

At a recent meeting of the Chicago Medical Society, he is said, in the daily papers, to have pronounced the bacteria theory so popular of late to be pure nonsense. The treatment he proposed consisted in the free use of water every hour in the day, nine hours' sleep regularly, and, if possibie, the sea or mountain air. Above all, the patient must look upon the drinking of water as his life. Regarding heredity as the great danger, Dr. Burt advocated the passing by Congress of a law forbidding the marriage of consumptives. With this in force, 100 years from now, he thought, consumption would not exist in the United States.—*Med. and Surg. Rep.*

Is Removal of the Tonsils Dangerous?—Removal of the tonsils by the bistoury or guillotine is a popular operation in this country. The French are less partial to it, and MM. Quenu and Lucas-Championniere have recently dwelt on its dangers at the Paris Societe de Chirurgie. The latter surgeon referred to two cases in Broca's practice, where profuse hæmorrhage followed removal of the tonsils. In one of these instances the patient, a medical student, died almost immediately af-

ter one tonsil was cut, so violent and uncontrollable was the bleeding. In a case in M. Lucas-Championniere's own experience the patient, a middle-aged man, had enlarged tonsils, quite free from inflammation, and he was not subject to any morbid condition liable to prevent the natural arrest of hæmorrhage. On removal of one tonsil hæmorrhage took place and could not be checked until after two hours of digital pressure with a tampon soaked in ergotine. M. Quenu always uses the galvano cautery three or four times, at intervals of a fortnight, and atrophy of the tonsil always follows. MM. Marc See and Chauval do not dread the knife. There can be no doubt that hypertrophy of the tonsils requires active treatment, especially in youth; the evil consequences of neglect are well known. In the majority of cases the risk of dangerous hæmorrhage is very slight; but the possibility of its occurrence should always be borne in mind, and the use of ice or of a styptic gargle should be enforced as a measure of precaution immediately after operation.—*Brit. Med. Jour.*

Conical Stump after Amputation in Children, with Especial Reference to its Physiological Causes and Prognosis.—The author concludes that:

1. Amputation through the arm or leg in children may be followed by a conical condition of the stump, and this sequel is a probability rather than an improbability.

2. This conicity may be physiological, and independent of inflammation or retraction in the soft parts or of osteophytic deposit at the end of the bone.

3. The younger the child and the nearer the seat of the amputation to the upper epiphysis of the limb, the greater the probability of early conicity. These factors should be considered when making prognosis.

4. The weight of extant authority favors flaps of excessive length, but this measure may not prevent development of the conical condition.

5. When the conical condition is present, the only suitable treatment consists in the resection of a sufficient portion of bone.

6. Successive re-amputation may be required.

7. The above considerations may apply, but with very much less of force, to amputations through the forearm or thigh.—Powers, in *Med. Rec.*

The Sterilization of Water.—Unless extraordinarily resistant, water becomes sterilized if it be at or near the boiling temperature for fifteen minutes. If the same degree of heat be maintained for five minutes, all harmful micro-organisms will have been destroyed. Still less time serves to destroy the disease-producing varieties which are recognized as liable to occur in water. Thus merely raising to the boiling point a clear water containing the micro-organisms of malarial disorders, typhoid, cholera, diphtheria, or of suppurative processes, and allowing it to gradually cool, insures the destruction of these germs. They are also destroyed by keeping the water for from a quarter of an hour to half an hour at a temperature of 70°C.

Occasionally, however, very resistant but harmless bacteria may get into the water. The brief heating renders them safe for drinking purposes; but when it is desired to destroy every micro-organism that may be present in a contaminated water, it should be treated for one hour and allowed to cool slowly. Then it may be used for cleansing wounds or for alkaloidal solution which will keep indefinitely if no germs be introduced after the solution has been heated.—Currier in *Med. Rec.*, June 14, 1890.

Lessons From the Application of a Blister.—Dr. Frank C. Bressler, of Baltimore, Md. (*Therapeutic Gazette*, July 15, 1890), details the toxic effects produced by the prolonged application of a blister prescribed by another physician, and sensibly concludes his communication as follows:

This case proves the importance that doctors who handle dangerous drugs must be careful to explain explicitly to patients what must be done if any untoward symptoms arise. Had this patient been properly instructed that in case he finds that he must pass water often, and particularly if attended with pain, to remove the plasters immediately, all this poor fellow's pain could have been spared. As it was, this poor man had a congestion of the kidneys induced, which may be the point of departure for some future kidney trouble. If, however, the patient had had a subdued Bright's disease, the occurrence of this intense congestion might have led to serious results.

Another point of importance is whether it is safe and advisable to order plasters of large size, composed of drugs which, when absorbed, might be likely to induce toxic symptoms, In this case we find that the combined plaster equaled an area of 48 inches. Now these were to be left on from 14 to 18 hours. I think it not safe to allow so dangerous a drug as cantharides to remain for this length of time upon the person of an uninformed patient, since individual peculiarities are such that one patient may tolerate this amount of 20 to 25 hours, while another could not stand 5 hours without toxic symptoms. Therefore individual idiosyncrasies are not to lost sight of.

To Preserve Ice.—The following method for preserving ice in a pitcher will not come amiss to those who need it for use all night or in the sick room. Fill the pitcher with ice and water and set it on the center of a piece of paper; then gather the paper up together at the top and bring the ends tightly together, placing a strong rubber band around them to hold it close, so as to exclude the air. A pitcher of ice water treated in this manner has been known to stand over night with scarcely a perceptible melting of the ice,—*Med. & Surg. Rep.*

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service.

From August 12, 1890, to September 6, 1890.

Vansant, John, Surgeon. Granted leave of absence for 30 days, to take effect upon return of Assistant Surgeon J. C. Perry to duty. September 5, 1890.

Wyman, Walter, Surgeon. To proceed to Cape Charlet Quarantine Station, on special duty. August 25, 1890.

Stoner, Geo. W., Surgeon. Granted leave of absence for four days. August 19, 1890.

Carmichael, D. A., P. A. Surgeon. Leave of absence extended 15 days. August 26, 1890.

Ames, R. P. M., P. A. Surgeon. To proceed to Memphis, Tenn., on temporary duty.

Devan, S. C., P. A. Surgeon. Leave extended five days on account of sickness. August 12, 1890.

Williams, L. L., P. A. Surgeon. Granted leave of absence for thirty days. Sept. 5, 1890.

Goodwin, H. F., Assistant Surgeon. Granted leave of absence for thirty days. August 21, 1890.

Cobb, J. O., Assistant Surgeon. To proceed to Marine Hospital, Detroit, Mich., for duty. August 16, 1890.

Hussey, S. H., Assistant Surgeon. Granted leave of absence for thirty days, August 19, 1890.

Perry, J. C., Assistant Surgeon. Granted leave of absence for twenty days to take effect when relieved. September 3, 1890.

Young, G. B., Assistant Surgeon. To rejoin his station at St. Louis, Mo., when relieved. September 3, 1890.

Appointment.

Rosenau, Milton J., Assistant Surgeon. Commissioned as an Assistant Surgeon by the President, August 25, 1890. Ordered to Chicago, Ill., for temporary duty. August 27, 1890.

USEFUL FORMULÆ.

On the Renewed Employment of the Nasal Douche and Kindred Procedures.—Several years ago attention was called to the danger of exciting ear troubles by the use of the nasal douche and similar procedures. For some time it seemed that this warning had been heeded. During the past winter and spring the author had seen a large number of these cases and thought it advisable to again call attention to the dangers that may follow the use of the nasal douche. In a few instances the results of the inflammation have been severe, but in the majority they have been simply an increase of the subacute nasal and aural catarrh.

As a safer and equally efficient method of treatment the use of a spray was suggested. The following preparations were mentioned:

℞ Eucalyptol,
Ol. gaultheriæ - - - aa gr. j.
Menthol - - - - - - gr. ij.
Benzoinol - - - - - ʒ ij. M.

If the patient objects to this, it may be substituted by

℞ Listerine - - - - - - 1 part.
Water - - - - - - 3 parts.

In the presence of an accumulation of viscid mucous or of crusts, a stream of flowing water will doubtless prove more effective than a stimulating spray. If the latter is used freely, and each time during the inhalation of a deep breath, crusts and mucus will speedily cease to play a part in the therapeutic problem. In no instance had he known the use of the mixtures mentioned to cause any unpleasant aural symptoms; the use of sprays must, however, be looked upon only as a valuable method of supplementary treatment, and not as a therapeutic procedure of the first order.—A. H. Buck, in *Med. Rec.*

Alimentary Regimen in Bright's Disease.—The climacteric prescriptions consist in avoiding humidity and sudden changes of temperature.

As dietetic prescriptions, avoid highly seasoned or irritating articles of food; suppress eggs; use the milk diet, pure or mixed; avoid wine, brandy, liquors, and even beer.

2. Regime of Senator.—It consists in authorizing the use of white meats and pork; in avoiding dark meats, and in using vegetables and milk. Senator permits the use of wine and water as a beverage.

3. Regime of Semmola.—It consists in the observation of the preceding prescriptions, and in the use as a beverage of the following solution, to be taken in the twenty-four hours:

℞ Iodide of potassium, - gramme, 1.
Phosphate of soda, - - grammes, 2.
Chloride of sodium, - " 5 to 6.
Water, - - - " 1,000.

4. Regime of Bamberger.—It consists in completing the lacteal alimentation by the use of tonics and preparations of iron. He recommends the following preparations:

(1) Pills of Perchloride of Iron.—These pills are administered in doses of from three to six pills a day:

℞ Perchloride of iron, - - centgr., 2.
Pulverized menganthes, - - " 5.
Extract of taraxacum, - - q.s.

(2) Pills of Sulphate of Iron.—

℞ Sulphate of iron,
Bicarbonate of soda, - aa grammes, 5.
Extract of dandelion, - - - q.s.

Make 60 pills. Six daily—three in the morning and three at night.

(3) Potion of Quinquina.—

℞ Bark of the gray quinquina, grammes, 20.
Infused for half an hour in
boiling water, - - " 200.

And add,

Syrup of bitter orange peel, - " 20.

A teaspoonful every two hours.—*Revue de Therap.*

ORIGINAL ARTICLES.

ELECTRICITY VERSUS THE KNIFE IN THE TREATMENT OF PELVIC DISEASE.

BY W. B. SPRAGUE, M.D., DETROIT, MICH.

Abstract of a paper read before the Mic an State Medical Society, at Grand Rapids, June, 1890.

The author assumes that the constant current of electricity, after the method of Apostoli, modified to suit varying conditions, is a suitable agent for the treatment of the following named diseases or abnormalities to which the knife has of late years been, perhaps too indiscriminately, applied, viz.: myoma, salpingo-ovaritis, ectopic gestation, and cervical stenosis, also that galvano-cautery is superior to the knife for the removal of uterine cancer and other pelvic tumors.

He does not wish to be understood as saying that electricity may entirely supplant the knife in gynæcology. He believes it to be a conservative measure of the greatest value, which should be tried in the majority of cases, and that in very many cases in which the knife is now used, its use might thereby be avoided.

MYOMATA.

HISTORY AND RESULTS.—Uterine myomata, though rarely fatal, were for a long time the despair of the physician and a lifelong curse to the patient. Early in my practice my ardor for the grandest and noblest work for humanity was greatly cooled by the appeals of a poor woman who was developing an uterine fibroid of a nature that I could give her (with my then knowledge) no hope of escape from a life of invalidism. My assurance that it would probably not be fatal only added to the frenzy of her despair, and she threatened herself to end the life which would henceforth be to her but a burden.

At that time, however, a work was in progress which originated in a paper by Atlee on "The Surgical Treatment of Certain Fibrous Tumors of the Uterus" (1883), and culminated soon after (1880) in this then remarkable statement by Thomas: "With the means at present at our command all the varieties of fibroids, the submucous, the interstitial, and subserous, are amenable to extirpation." Contemporaneously with this movement a few men were devising a means of relief by electricity.

The author quotes from Cinselli and Cutter, who first called attention to the electrolytic power of the continuous current for tho resolution of tumors in 1871; also from Thomas, Apostoli, Playfair, Engelmann, Munde, Martin, and others.

ERIENCE.—Because my personal experience with myomata is limited to two cases, I will report them both.

CASE 1.—Mrs. C. K., æt. 39 years, had one pregnancy resulting in a miscarriage, some 20 years since. She called me in the spring of 1887 to relieve her of a dragging sensation in the pelvis and many nervous symptoms. I found, as the only apparent cause of her symptoms, a small subperitoneal myoma, about the size of a very small hen's egg, situated anterior to the cervico corporal junction. I gave ergot, tonics, and nerve sedatives, but the tumor continued to grow until at the end of four months it had doubled in size and the patient was unable to attend to her household duties, but was obliged to keep her bed most of the time. I then called Dr. McGraw in consultation. He discovered a boggy condition in the left vaginal vault which I had overlooked, accompanied by some tenderness on pressure. He advised glycerine and iodine tampons, and subcutaneous injections of ergot. Under this treatment the tenderness soon disappeared and the size of the tumor diminished until in two months it had returned nearly to the size at which I had discovered it, and she was able to again resume her lighter household cares. From this time the size of the tumor varied little, the patient coming weekly to my office to receive the hypodermic injection, until the summer of 1889, when it again began to grow and persisted in spite of more frequently repeated injections of ergot, until it reached the size of a large orange. now determined to try electrolysis. From August 2, 1889, to May 30, 1890, I made 33 applications of the current, 19 of which were positive, intra vaginal, a cotton-covered carbon electrode being pressed underneath the tumor, so that it would lie in the most direct circuit, the strength of the current varying from 40 to 90 milliamperes. The other applications were negative, intra uterine, the insulated electrode terminating in a bulb having a surface of about three square centimeters, also placed so as to bring the tumor in the direct circuit. The strength of the current was from 30 to 50 milliamperes, all that the patient would bear without great demonstration of pain. The size of the growth has steadily diminished unti at the last treatment it was a nodule about the size of a peach pit. Her health is better than for years, and she not only does all her own housework, but has cleaned her house throughout without help, this spring. (Note.—Since writing the above, June 17, I again examined the patient very carefully and could find no trace of the tumor.)

Summary.—Subperitoneal fibroid complicated with slight tubal trouble; tube cured and tumor greatly reduced; patient symptomatically cured; treatment continued at intervals of two or three weeks, hoping to entirely obliterate the tumor.

CASE 2.—Miss M. B., colored, æt. 22 years. Was called July 25, 1889, to find her suffering from intense pelvic pain and fever. A small conical cervix presented at the introitus and was very slightly movable. Extreme tenderness prevented further vaginal examination, but abdominal palpation discovered a pathological enlargement filling the hypogastrium and right iliac re-

gion. High temperature and severe pain persisted against all efforts at relief for two or three days. In time I was able to ascertain that I had to deal with a fibroid tumor the size of a small child's head, and an evidently resulting acute, right salpingo-ovaritis and peritonitis. She was confined in bed the most of the time, under the usual treatment for pelvic inflammation, until Sept. 10, when she walked two blocks to my office. I now found that the tumor was subperitoneal and post-uterine, crowding the womb down to the position at which I had first found it. I at once began the electrolytic treatment, using the cotton-covered vaginal electrode for the active (positive) pole, placing it high up in the cul-de-sac, behind the tumor, so as to bring it between the electrode and the abdominal plate, and using a current from 40 to 150 milliamperes at intervals of three or four days. The right ovary was enlarged and prolapsed, and the tube thickened by inflammatory deposit. I therefore also placed the electrode behind the mass and passed the current, beginning with 10 and gradually increasing until after some weeks I had reached 30 milliamperes through it also.

The symptoms improved rapidly and the tumor diminished gradually until the last of December when she one day mopped the kitchen floor with the windows open, and wearing thin slippers, from which she contracted a severe cold and renewed inflammation of the right tube and periosteum. This relapse was of a brief duration and the treatment was continued as before until April 25, 1890, when she left the city. The tumor was now reduced to the size of a hen's egg and the womb was restored to nearly its normal position. The ovary and tube still gave her trouble, although they were somewhat improved by treatment. But she had done all except the heaviest work for a family of five for several weeks.

Summary.—Subperitoneal fibroid complicated with acute salpingo-ovaritis; tube and ovary improved and tumor very much reduced; symptomatic cure of tumor.

Salpingo-Ovaritis.

After quoting the opinions which have been expressed by other workers in the same field, important among whom are Gunning and Grandin, Dr. Sprague gives his own personal experience as follows:

Personal Experience.—During the year ending, June 8, just passed, I have treated, electrically, 15 cases of salpingo-ovaritis, of which I will make a brief summary, as follows:

I. Catarrhal Salpingitis.—(I have placed those cases in which there was some thickening or contraction of the tubes and sensitiveness to pressure, under this head.) 7 cases; 79 applications of the current; 2 cures and 5 improvements.

II. Acute Pelvic Peritonitis.—(Previous tubal trouble probable but not certain.) 3 cases; 51 applications: 2 cures (inflammatory product wholly absorbed,) 1 improvement.

III. Chronic Pelvic Peritonitis.—(Tubal complications.) 2 cases; 56 applications; 2 improvements.

IV. Hemato-Salpinx.—(Probable.) 2 cases; 29 applications; 2 improvements. The tubes became suddenly much distended, just before the menses, and slowly returned to nearly a normal condition under treatment.

V. Pyo-Salpinx.—1 case; 29 applications; improvement.

The applications were mostly vaginal, the electrode (positive or negative, according to indications) against the tube, the current strength from 20 to 70 milliamperes.

The case of pyo-salpinx is one of considerable interest to me, and I will ask your forbearance while I report it more fully.

Mrs. H., æt. 32 years, has had one miscarriage, but for several years previously she had suffered from a pain in the right iliac region, at frequent intervals. A year ago last April she began to suffer more than ever before, and came to me for relief. She told me, in describing her symptoms, that she had an enlargement in the side with pain. I found this enlargement to be considerable, but the abdominal muscles were strong and I could not distinctly outline it. I diagnosed an ovarian tumor, and felt that my diagnosis was confirmed as I watched its growth in after days. But one day she came to tell me that she had a free discharge of yellow matter after a sensation as of something giving way, the night before and the swelling was subsiding. An examination proved the correctness of her statement and I changed my diagnosis to pyo-salpinx. My treatment to this time had been merely palliative, principally faradism, to relieve the pain. She was now comfortable and I suspended treatment a few weeks, when the tube began to fill again. I resumed the faradism and soon after added galvanism. On June 15 I gave 25 milliamperes, intra-uterine, negative. After three intra-uterine applications, the last one 65 milliamperes, I changed to the vaginal electrode, placed against the tube, 65 milliamperes, June 29. Soon after this there was a second discharge of pus and relief from pain. I gave 21 more applications similar to the last described, before March 29, 1890, when the tube had again filled and was giving considerable trouble. I now determined to try to effect an entrance into the tube. I therefore converted my graduated uterine sound into an electrode, insulating it with small rubber tubing, and passed it into the womb. I then connected it with the negative pole of the battery and turned on 10 milliamperes. Turning the end of my sound toward the right cornua, I exerted gentle pressure against the point that I thought to be the proximal end of the tube. Suddenly, within 5 minutes, my sound slipped onward about an inch. I was startled and thought of perforation of the uterine wall, but observing my patient undisturbed, I decided that I had really been more fortunate than I had expected, and accomplished my purpose. So I passed the electrode still farther in and raised the current to 25

milliamperes for 7 minutes. There was free discharge of pus for several days following, and renewed relief from all the symptoms. I have since introduced the sound into the tube on May 12 and 25 on June 12, the last time in the presence of Dr. Manton who kindly came in to confirm my diagnosis. The tube seemed quite empty of pus at the last sitting. The sound has passed more readily at each subsequent sitting, and enters to a depth of more than 5 inches. The patient, who is a seamstress, has not lost an hour's work from treatment, and her general health is much better than a year ago.

Ectopic Gestation.

History and Results.—It is said that Bachetti was the first to employ electricity in the treatment of extra-uterine pregnancy. He employed electro-puncture in 1853 and saved his patient. In 1866 Braxton-Hicks made two applications of electricity with a view to destroy the fœtus, but afterward punctured the cyst and his patient died. The *American Journal of Obstetrics*, May, 1888, contains a table of statistics of Brothers, of 43 cases which he had been able to gather at that time, which had been treated by electricity. Of these cases only two were fatal, and in only two had there been failure to kill the fœtus. In December, 1889, he had been able to trace the after behavior of these cases in 25 instances for periods varying from one to eight years, and found all cured and in good health. Thomas reports 14 cases, all of which recovered. In only one was there any trouble. Emmet says, "I have seen in consultation the greater proportion of the cases which have been treated in New York, beginning with the first case, and I do not know of a single instance where the result has been other than entirely satisfactory." Rockwell reports 13 cases with no unfavorable results. Aveling has reported some cases in the *British Gynecological Journal*, vol. iv, pp. 24–65, 1888. Sims, Lusk, Garrigues, Munde, Goelet, Chadwick, Aveling, Galabin, VandeWarker, Mann, Reeve and several others have reported successful cases.

It will thus be seen that this is essentially an American practice as yet, but in spite of the ridicule of Tait and the objections of others who have no experience with the method, the weight of such evidence as the above, taken together with the rationale and evident relative safety of the practice, bespeak for it an unbiased consideration by gynæcologists everywhere.

Rationale.—The experiments of Leopold, although now quite well known, demand mention here. Performing laparotomy upon several non-pregnant rabbits, he placed within the peritoneal cavity embryonic rabbits at different periods of development, ½, 5, 6 and 8 centimeters in length. One rabbit died of peritonitis on the second day, when the smallest embryo was wholly disintegrated. The rest were killed at periods varying from one to ten weeks, and the fœtal rabbits, were, as a rule, encapsulated. One of the smallest, 18 days old, was found to be the size of a "bean" on the 37th day; and one 8 centimeters long, at full term, was mummified on the 66th day, with a capsule 2 or 3 centimeters thick. Gynæcological history is not wanting in evidence that devitalized human fœtuses undergo the same process, in fact, that this is nature's habit. Kuechenmeister classes the changes that occur in the fœtus under three heads: 1st, absorption of the fluid, calcification of the membranes, and mummification of the fœtus; 2d, absorption of the fluid, calcification of the membranes, and calcification of the fœtus at adherent points between the membranes and fœtal surface; 3d, calcification of the entire surface of the fœtus with mummification of the inner parts. In most of the cases collected by him the fœtus had reached full term, and one of them had occupied the peritoneal cavity for 57 years. (*Arch. f. Gyn.*, May 17, 1888.)

Landis has proven the power of the faradic current to suspend, temporarily or permanently, the vital functions of beetles, minnows and very young rabbits, depending on the vitality of the creature and the strength and duration of the current. (*Am. Jour. Med. Sci.*, July, 1885). These experiments were limited to the faradic current, and since I held a theory that the death of the fœtus usually occurs, when caused by faradism, not by the direct action of the current, but by the strong muscular contraction of the tubes themselves, but that galvanism acts directly upon the fœtus itself, I determined to repeat his experiments, using both currents. Landis had no trouble in killing minnows and rabbits if the strongest current were applied for two to five minutes or more, but the beetle survived after the full strength of the battery had passed through needle electrodes placed in the pharynx and anus, respectively, for one full hour. I therefore chose a beetle as a subject of my experiments, selected the doryphora 10-lineata (Colorado potato bug), and collected both the beetle and its larvæ.

Experiment 1. With the strongest possible current of a Kidder, tipjar battery, I brought one of the beetles into the circuit, between metallic electrodes, for five seconds. It is a characteristic of this beetle that it will drop on its back and draw its legs close to its body as soon as it is disturbed. As soon as I applied the current, however, the legs were immediately extended, assuming the position in which they are found in a dead beetle. It remained in this position for three minutes and then resumed its feet as lively as before. I then passed the current through it for one minute, in the same manner, and achieved the same result, except that it was twenty minutes in recovering itself, this time. It seemed quite dead meanwhile.

Experiment 2. I faradized a fresh beetle one minute. The result was the same as in the last part of the previous experiment.

Experiment 3. I passed the current through one of the larvæ for five seconds. The method was the same. It recovered in thirty minutes.

Experiment 4. Shocked five small larvæ by passing a single faradic spark through their bodies. They all

seemed dead for thirty minutes, when four recovered. The other never recovered.

Experiment 5. Placed my metal electrodes one and one-half inches apart, upon a ledge of moistened paper, on which were four larvæ, between the electrodes. They at once assumed a peculiar shape, the back being humped to an extreme degree, and one of them fell upon its back.

Experiment 6. Placed a needle electrode in the anus of a beetle, and applied the other pole against the thorax, and passed a constant current of fifty milliamperes or five seconds. But I lost track of it and do not know if it survived.

Experiment 7. Passed the same current in the same way through another beetle. The legs would twitch occasionally, after an hour, for ten hours. It was quite dead when examined—twenty-four hours after the shock.

Experiment 8. Inserted one needle in the thorax and the other in the anus of another beetle, and passed 50 milliamperes for one second. The result was the same as in Experiment 7.

Experiment 9. Placed a larva between metal pointed electrodes and passed thirty milliamperes one minute. This caused instant death.

Experiment 10. Covered my electrodes with loose absorbent cotton and moistened it thoroughly. Placed a larva between the poles and passed thirty milliamperes one minute. It was instantly killed.

Experiment 11. Repeated Experiment 10, except that I passed the current only one second. The larva revived after fifteen minutes.

Thus am strengthened in my theory and belief that because the galvanic current is more efficient to kill but causes less contraction, it is the safer current to use, if there be any truth in the claim that there is danger of causing rupture of the tube, and there may be in some cases. On the other hand, in those cases in which we have reason to think that the muscles are strong enough to expel the ovum into the uterus, the faradic current is indicated. It is thought that in one case an extra-uterine was converted into a normal gestation by this means, and carried to term.

Cervical Stenosis.

History.—But little has been written concerning the treatment of this affection by electricity. In 1887 Dr. Fry read a paper before the Washington Obstetrical Society, in which he advocated electrolysis as the best treatment, both for temporary and permanent effects, in cases of narrowed cervical canals, and reported some successes. A few other favorable reports have appeared here and there in our current medical literature.

Rationale.—Any tear or incision of the cervical tissue is liable to result in a deposit of cicatricial tissue, sooner or later. In this respect it differs, apparently, from any other oral structure. Thus the incisions of Simpson and Sims, as well as violent divulsion, while giving undoubted relief from the symptoms due to stenosis, may ultimately result in the very condition for which we must seek relief in Emmet's operation. The true physician ever seeks, not to improve upon nature's architecture, but to bring about natural conditions wherever disease or malnutrition has caused a deviation therefrom. Of the procedures heretofore in vogue, moderate gradual dilatation is the most conservative, but the results are apt to be transient unless the cellular tissue be torn asunder. Electricity stimulates nutrition, a point that is not sufficiently appreciated by those who find it so difficult to comprehend how there can be any virtue in this agent. By its electrolytic action it causes resolution of morbid structures and increased growth of normal tissue. The negative pole causes relaxation of all contractile elements, and relaxation of the blood-vessels and lymphatics results in increased oo supply and greater absorption. Thus it the agent par excellence to accomplish the object sought in this abnormal condition. Its advantages over the usual methods may be thus summarized:

1. The risk attendant upon the use of anæsthetics is who y obviated.

2. The result can be accomplished with no suffering to the patient, and without in the least interfering with the avocations of life.

3. The presence of perimetritic inflammation is no contra-indication; on the contrary, the mild current necessary will incidentally benefit chronic inflammations.

4. With proper intensity of current there can be no resulting cicatrix, but a normal, healthy canal may be expected to result.

5. The influence of the current upon the nutrition of the womb is far more effective in securing proper development of the uterine wall, and thus securing correction of the flexion and of infantile uterus, than could be obtained by the stimulus of the usual procedures.

Personal Epperience.—I have treated five cases on the principles just elucidated, during the past year, making a total of eighty-five applications, and all these cases are now well. I must again ask your forbearance while I relate a typical case, both for the purpose of giving the results and of illustrating the method as I have practiced it.

Miss M. M., æt. 19 years, came to me Dec. 13, having just missed her period. She was an anæmic girl, with a tuberculous family history, and has nearly always had painful periods, especially of late, but she has recently frequently missed them altogether. At the time of her first visit she was suffering from backache, constipation and anorexia, and had a severe cough. There was slight dulness and slightly prolonged respiratory murmur at the apex of the right lung. A blowing systolic murmur was particularly loud in the second right intercostal space. A loud venous hum was heard in the jugular. The cervix was long and conical, terminating in a pin-hole os. The uterus was sharply anteflexed in the supra-vaginal portion, and retroverted.

I placed an abdominal electrode, and arranged my Sims' sound as an electrode for internal use. The ter-

minal bulb of this sound is about equal to No. 9 of the French scale. barely succeeded in introducing it through the external os, and then turned on a current of ten milliamperes. Within three minutes it slipped through the internal os, when I reduced the current to seven milliamperes and continued it for ten minutes. I then introduced a pledget of cotton saturated with boroglyceride, after repositing the womb as best I could, and gave a central galvanism. Prescribing a laxative and cod-liver oil, I told her to return. On January 2, I repeated the treatment, using a larger electrode on this and seven subsequent occasions before February 1, introducing a No. 17 electrode on January 31. On February 3, her menses came and were without pain, so that in telling me of it she expressed herself, "Why it seems so strange not to have the backache at that time!" During February I gave five treatments, using a No. 26, French scale, electrode on the last occasion. The menses returned March 10, and were painless, as they have been ever since. I gave four treatments during March, and one in April and May, respectively. Her last report was May 22, when she was feeling perfectly well. Her cough, constipation, anorexia, in fact, nearly all the symptoms of which she had complained, were gone in February, and have not reappeared to any degree since. Her color has improved much.

Another case, which was, however, complicated with a long-standing and extreme retroversion and endometritis in a lady married seven years, but sterile, who had known only two painless periods in her life, was cured about the same time, and is now probably pregnant. Her pain had confined her to bed every month—"regular labor pains," she said; but every flow since the treatment began, four in all, to the time she became pregnant, was painless.

I have found electricity superior to many agents which I had tried, in two cases of urethral caruncle. In one I used the galvano-cautery, in the other electrolysis. I was best satisfied with the latter.

Cervical Cancer.—Byrnes, who had been working faithfully with galvano-cautery in cervical cancer for years, recently reported 367 cases operated upon in five years. Of these 59 were post-vaginal, 81 cervical, 8 corporal and 219 cervico-corporal. In the first class the average period of exemption was more than six years, 13 having been under observation more than ten years. In the second it was between four and five years, and in the other two from two to three years. Such results are strong arguments. He believes that by the cautery not only is the cancerous tissue destroyed, but the heat extends beyond the parts which are visibly diseased, arresting the development of cancer cells or germs, or exerting some powerful modifying influence upon the pathological process at a degree which does not seem to be destructive to normal tissue. (Trans. Am. Gyn. Soc., XIV, 1889.) These claims are substantiated by Dr. Inglis Parson, who advocates electrolysis to arrest cancer of the breast. He anæsthetizes his patient and passes fine insulated needles through the tumor and all tissues for some inches around, taking care not to injure the skin. He then passes a current of from 10 to 600 milliamperes through in every direction, from 50 to 100 times (*London Lancet*, Nov. 30, 1889). Dr. Kellogg, who has had a large experience in this, as in all lines of electric treatment, will, I trust, give us his views by word of mouth.

General Deductions.

1. Myomata should receive a thorough trial by electrolysis before attempt at extirpation.

2. Interpolar electrolysis is sufficiently well established to expect good results in reducing myomata without puncture, if a strong current be passed directly through the tumor. Puncture should wait upon interpolar electrolysis.

3. All inflammations of the uterine adnexa should be treated by electricity thoroughly, before laparotomy is resorted to, for many cases are amenable to this treatment.

4. There are some cases of pus-tubes that may be best treated by opening the uterine end of the tube and securing drainage through the uterus. Others should be punctured by electricity, through the vagina.

5. Ectopic pregnancy should be treated by electricity as soon as a diagnosis is made, either by galvanism, to kill the fœtus, or by faradism, to expel the same, provided it has not passed the fourth month of gestation, or there is not actual or impending rupture of the tube.

6. Electrolysis is the proper treatment for cervical stenosis.

7. Galvano-cautery is a superior means of extirpating uterine cancer, in many cases.

8. Early diagnosis and proper treatment of endometritis by intra-uterine electrolysis will cure most cases, and prevent many cases of salpingo-ovaritis.

9. All surgical procedures that may be performed by electricity, are better so performed because of the incidental influence upon nutrition.

10. Electricity is a conservative measure of great value in the treatment of nearly all pelvic diseases where the knife is now used.

ALCOHOL—ITS USE AND ABUSE.

BY S. HENRY, M.D., CAMP POINT, ILL.

For thousands of years the human family has injured itself by the use of intoxicants. Fifty years ago alcohol was regarded as an instrument that might be used for good or for evil. Now, however, it is spoken of as if it had the power of volition and was possessed of a moral nature; as if it were responsible for the drunkenness with which the land is cursed. It is denounced as "A fiend of hell," "Liquid damnation," etc.

So long as such utterances came only from the illiterate, itinerant temperance lecturers, physicians could af-

ford to treat them with silent contempt. But the case is quite different when scholarly gentlemen, at the head of the religious press, speaking of alcohol, use this language: "It is so nearly indigestible that the stomach always gives it up and sends the most of it into the blood unassimilated. To say that putting an article into the stomach which, with all its resources, this organ is unable to subjugate—to give it work which it cannot do after taxing all the vitality that is tributary to it, and to do this with the object of strengthening and giving tone to the stomach and system, is about as ridiculous a contradiction as is conceivable."

Is it not time that physicians should speak out and tell the world that when they prescribe alcohol they neither expect the stomach to digest, assimilate nor subjugate it? Is it not strange that educated, intelligent men do not know that the object of digestion is to prepare food for absorption into the circulation? That the reason why alcohol is not digested is because it does not need to be digested any more than does water? That properly diluted it is always in a condition to be absorbed? This fact that alcohol mixed with water enters the circulation promptly without having to be digested, is one of the advantages in using it in protracted cases of sickness when the hydro-carbons, so much needed to prevent the waste of the system, cannot be digested. Alcohol supplies the elements of combustion and tides the patient over a dangerous crisis.

This effort to prejudice the public against the use of alcohol as a drug is made by some who imagine that they are laboring in the cause of temperance. They seem to think that the use of alcohol as a drug begets an uncontrollable appetite for it, whereas such an appetite cannot be engendered without drinking to intoxication more than once. The effect produced on the palate never begets an uncontrollable appetite for intoxicants. It is only the oft-experienced exhilerating effects on the brain, called drunkenness, that brings the will under the control of the appetite. This fact should be emphasized and repeated until no man who has any respect for his reputation for veracity will lay the guilt of the drunkard at the door of a physician. Every man is the builder of his own character.

It ought, likewise, to be understood that in health man does not need alcoholic liquors of any kind; that its habitual use tends to induce disease. After one has injested a sufficient quantity of food if he should add a glass of brandy, wine or beer, the alcoho being more combustible than the solid food, will be burned up and a proportionate quantity of the hydro-carbons will remain in the system as a burden to be borne, or to be eliminated by an extra effort of some of the excreting organs. The laws of health demand the practice of total abstinence from the habitual use of intoxicants.

In the Fiji Islands a disease has appeared of late years bearing all the characters of leprosy, to which a number have succumbed; leprosy has also found numbers of victims in New Caledonia.

REPORT ON PROGRESS.

OTOLOGY.

BY J. B. SHAPLEIGH, A.B., M.D., ST. LOUIS.

Aural Sequelæ of the Eruptive Fevers.

The author calls attention to the importance of prompt treatment of the aural complications in these cases and outlines the proper course for the practitioner to pursue in each class. His division is as follows:

1. Simple inflammation of the middle ear during the febrile attack.
2. Fully developed suppurative otitis media.
3. The development of mastoid disease from this.
4. Mastoid disease proper, with its complications and accidents.
5. Operative procedures.

Under the first head he says:

When pain is prolonged, I most strongly urge the practitioner to puncture the drum membrane. If pus is present a way out is thus made, and if pus is not yet developed, the depletive hæmorrhage that results from this procedure may prevent pus formation. It certainly in most cases instantly relieves the pain, and in no case have I seen harm result.

I would simplify the procedure and have the practitioner understand that it does not require complicated instruments, nor even reflected light. The end of the small Von Græfe cataract knife may be wrapped with thread so as to leave bare about $^1/_{16}$ inch of the point. The lowest point of the membrana tympana can then be perforated without danger of injuring the tissues of the middle ear.

While advocating firmly the necessity of an early opening in the membrana tympani to relieve the middle ear of pent-up secretion I must object to both the indication for the operation and the manner of its performance as given above.

Pain in these cases is caused by pressure upon the nerve filaments in the mucous membrane of the middle ear and this pressure may arise from swelling of the membrane itself, from cellular infiltration or from free exudation in the tympanum. Obviously paracentesis of the drum-head will afford relief only in the latter case, and the indication for its performance is found in the presence of exudation in the middle ear and not simply of pain.

As soon as the presence of exudation is established—as shown by bulging of the drum-head—the opening should be made. In these cases especially is its early performance indicated since in the exanthemata there seems to be a special tendency to rapid destruction of the membrana tympani. As regards the "depletive hæmorrhage" from the puncture, in my opinion leeching or the use of Bacon's artificial leech will exert a much more decided influence for the bleeding from a paracentesis is generally but slight.

As quoted above the procedure, is indeed "simplified." In my judgment entirely too much so. Without an inspection of the drum-head the necessity for the operation can not be determined and to attempt it in the dark, even with a guarded Von Graefe knife, is to trust to chance for success and for avoiding injury to the delicate structures of the middle ear. No one not competent to examine the ear by reflected light should undertake this "procedure" and to make the attempt without proper illumination is unjustifiable.

The author "deprecates the use of the syringe" in cleansing the ear, "because the force of this instrument tends to drive the fluid pus into and among the cells of the mastoid, and the pain of the operation is objectionable."

He advocates the use of peroxide of hydrogen instead and employs a $^{25}/_{100}$ solution.

He thinks mastoid disease not so infrequent in acute middle ear suppurations as commonly supposed but considers the danger still greater in the chronic form. In opening the mastoid he prefers the chisel for adults and a heavy pointed knife for children.—Grant Cullimore, M.D., in *Kansas Medical Journal*, June, 1890.

Mutual Relations of Laryngology and Otology.

This has lately been made a prominent topic in medical circles started by a paper read by Dr. Daly before the New York Medical Society and which was noticed in a former number of the Review.

His position was rather an extreme one for the present time and later articles take a modified position. Dr. Daly charged otologists with being ignorant or neglectful of the importance of nasal disease in relation to aural conditions.

In the *Times and Register*, for August 9, 1890, Dr. C. W. Richardson, of Washington, has an article (read at the Nashville meeting of the American Medical Association) on this subject in which he thus states his position.

"In the presentation of this subject to-day, it is not my intention to array the rhinologist against the otologist, but simply to insist upon the necessity of the thorough surgical treatment of certain conditions existing within the naso-pharangeal cavities as an aid to the radical removal of, and in preventing the recurrence of certain affections of the middle ear. During the past decade, the intimate relationship existing between, or rather dependence of, diseases of the middle ear upon those of the naso-pharynx, has been so thoroughly recognized as to cause a great increase to that class of specialists, whose education from its incipiency has been such as to thoroughly imbue them with these ideas; whose education in the ear has been as thorough as in that of the nose and pharynx; whose education has been such as to cause them to view the diseases of the ear, in many cases, to be dependent upon an existing disease of these cavities; whose education has caused them to search for these causes, to remove them when present, and thus thoroughly to relieve their patients—to this class of practitioners, and as an humble exponent of these ideas, I claim to belong."

While emphasizing the importance of naso-pharangeal treatment in many aural conditions he goes on to say:

"In showing how inadequate the ordinary treatment of ear affections under the care of the auro-ophthalmologist is, I do not wish it to be understood that I am to any extent an aural nihilist. I am afraid a great many of my medical confreres are claiming too much for the independent use of the forceps, cautery, snare, drills and saw. I doubt very much of their curing all the ills to which the ear is subject, unless they at the same time resort to a judicious use of aural therapeutic measures. Firmly convinced, as I am, of the value of naso-pharyngeal surgical methods, I have not yet thrown away the leech, douche, paracentesis knife, Politzer's bag or catheter; our only safeguard is the judicious use of these means and the acknowledgment of their just therapeutic value. On the other hand, we must acknowledge the increased successfulness, or aid to success, in otological work rendered by the rhinal surgeon; but while acknowledging these achievements, one must remember that there are a vast number of aural cases falling under our observation thoroughly independent of any change within the naso-pharyngeal cavity; the affection in the one being synchronous with, but independent of, the other: the relief of the one not arresting the retrogressive progress of the other. It is almost unnecessary for me to state that I refer to sclerotic changes within the tympanic cavity. These cases are usually present in persons manifesting little or no change in naso-pharyngeal cavity, with patulous tubes. What aid can the rhinologist here furnish? If the patient is to have relief it must be through aural therapeutic employed in the hand of the skilled otologist. It is nonsense for one to agitate ideas having in view the condemnation of otological therapeutic methods—they have a vast field of usefulness."

With this statement I am wholly in accord, and this was the point raised against Dr. Daly's paper when noted in the Review.

At the same meeting (Am. Med. Asso., Nashville,) John O. Roe, M.D., Chairman of tho Section of Laryngology and Otology, makes this the subject of his address. (*Jour. Am. Med, Asso.*)

I wish to make but one quotation from his address:

"It is an encouraging sign of the time to see otology seeking a divorce from its old associate, ophthalmology, and forming an alliance with its more congenial friends, laryngology and rhinology. Notwithstanding the fact that ophthalmology is still trying to maintain its former relation with otology, it must be evident to every intelligent person that the eye and ear have too little in commom to justify this relationship."

The fact is that etiology is now entitled to recognition as a distinct specialty and not as a mere adjunct to ophthalmology or laryngology, though more nearly allied to the latter than the former.

Sub-Mucous Resection of Cartilage in Deviations of the Nasal Septum.

Of interest in this connection I notice the author's method of operating for deformity of the septum. Briefly it is as follows:

A long curved incision, convex toward the floor of the nostril, is made through the mucous membrane covering the septum on the occluded side. The membrane is then raised from the cartilage or vomer forming a flap.

The septum is then incised as needed, care being taken not to perforate the mucous membrane of the opposite nostril. This is guarded against by the little finger placed in the unoccluded nostril. The piece of cartilage is then separated from the still adherent membrane in the free nostril and lifted out with forceps. This leaves the two layers of mucous membrane in contact by their septal surfaces and one or two sutures may then be used to hold the original flap in place. This method avoids an opening between the two nares.—Jno. B. Roberts, M.D. in the *Medical and Surgical Reporter.*

Disappearance of the Auditory Nerve.

Habermann (*Centralb f. Med. Wissen*) has recently reported some cases of internal ear trouble where the nerve had entirely disappeared. In one case of a woman, æt. 51 years, in place of the nerve a very thin, slimy connective tissue and a few blood vessels were found. This woman had received a blow on the skull eight years before which injured the brain where the auditory center is situated, and this is assumed to be the cause of the atrophy. Another case was that of a woman, æt. 52 years, a mute. The same condition existed here. And Habermann assumed that the exudation around the nerve during an attack of the cerebro spinal meningitis led to its atrophy and final entire disappearance.—*Times and Register.*

TRANSLATIONS.

FROM THE FRENCH.

BY E. MUELLER, M.D., ST. LOUIS.

On Renal Insufficiency and its Treatment.

In a clinical lecture by Dujardin Beaumetz, published in *Bulletin Medical*, he says that in renal insufficiency it is of the greatest importance to know the amount of solid ingredients contained in the urine. The quantity of urine secreted is a matter of secondary consideration. If the solid ingredients, and especially the nitrogenous substances, are found in diminished quantity for any length of time, we have renal insufficiency. For all practical purposes it is sufficient to make an approximate calculation of the amount of solid substances. The amount of albumin contained in the urine is not of very great importance; in the worst cases a hardly appreciable quantity of it may be found, while a considerable quantity, 75 grains and even more, is sometimes found in the urine of patients in a satisfactory state of health. Our whole attention should be given to the quantity of solid substances, and to the presence of toxic materials.

When there is a deficiency of solid ingredients in the urine, we must, in the first place, endeavor to hasten the elimination of toxic principles accumulated in the system; and secondly, to reduce to a minimum the amount of toxic material introduced with the food, or the result of assimilation, or of mal-assimilation.

To meet the first indication, purgatives, diuretics and sudorifics may be employed. The belief was formerly entertained that in chronic nephritis the use of diuretics might increase the congestion by throwing more work upon the kidney, and in that way even aggravate the disease; but it is now generally conceded that it is rational to employ diuretics in this condition. The special class of diuretics, which induce diuresis by increasing arterial tension must be used. Amongst these, preparations of digitalis are the best. Strophanthus has the great advantage of producing an immediate action. It may be given in all cases where the pathological changes in the kidneys are not too far advanced, for in order to enable this class of diuretics to act, there must be a certain amount of healthy tissue remaining in the kidneys; they will not produce any effects if the heart presents a condition of complete sclerosis, or if the kidneys have undergone radical changes. Sparteine, adonis and convallaria are of minor importance. Caffeine has the great advantage that it can be given hypodermically. A syringeful of the following solution may be used, repeated two or three times a day, as needed:

Pure caffeine, benzoate of soda, ½ drachm of each; Boiled water, 1½ drachms.

Theobromine is similar in its action to caffeine. Kola also possesses decided diuretic virtues, no doubt, on account of the caffeine and theobromine which it contains. An infusion of roasted kola nut may be used; it is prepared like coffee. The diuretic action of lactose and glucose has been demonstrated beyond a doubt. Germain See used milk sugar in 25 cases of renal insufficiency, administering about three ounces per day, dissolved in one-half gallon of water; the effects were remarkable. The author used glucose instead of milk sugar with equally good results. If there is vomiting or a repugnance to sugar, a solution of either milk sugar or glucose may be injected into the rectum, as these solutions are readily absorbed by the large intestine. The use of purgatives is also of much importance; all patients with urinary insufficiency ought to have at least two or three liquid stools every day. To get this result all the different laxatives may be made use of, even drastic purgatives may be given, when there are symptoms of uræmic poisoning. At last the cutaneous surface ought to be made to thoroughly perform its functions. Daily sponge-baths of lukewarm water with

the addition of cologne or other aromatic alcoholic liquid may be given, followed by energetic frictions.

But often, in spite of all efforts and the use of the most active eliminating agents, we are powerless to rid the system of toxines in sufficient quantity to prevent symptoms of poisoning. Even then we need not despair; inhalations of oxygen may be used; they act by hightening the vitality of the red blood corpuscles, by causing increased combustion, and thereby permitting the destruction or transformation of some of the toxic principles. Or blood-letting, either local or general, preferably the latter, may be resorted to; a certain quantity of poisonous materials accumulated in the blood may be eliminated in this way. As to the amount of blood abstracted, we must be guided by the resisting power of the patient; when there is great weakness, transfusion must be thought of.

All symptoms of a serious nature supervening in the course of urinary insufficiency, are the result of the accumulation of toxic materials in the system. These have three different sources. Some originate in the physiological processes taking place in the organism; others are the result of faulty digestion. Still others are introduced with the food, meat containing a number of cadaveric alkaloids. The therapeutic measures adopted must correspond to these different sources. Fatigue and severe physical as well as intellectual exertions must be avoided, the digestive functions must be regulated, abnormal fermentation combated by intestinal antisepsis, for instance:

Salicylate of bismuth,
English magnesia,
Bicarbonate of soda, of each 2½ drachms.
Divide into 30 wafers.
Salol or alpha-naphthol may be added.

A chiefly vegetable diet must be adopted, consisting of milk, which may be taken in any shape or form, cream and custards, also cheese, not in a state of decomposition; eggs, farinaceous foods, beans, lentils, chocolate; green vegetables and fruits must be well cooked. Bread should be well baked or toasted. If meat is allowed, it must be well done, as cooking destroys the elements of putrefaction and fermentation. Game, oysters, fish, old cheese must be absolutely forbidden, because they all contain ptomaines. Beer or malt extract may be taken, but no liquors or wine. This diet is applicable only in the less serious cases; when symptoms of poisoning threaten, an exclusive milk diet must be adhered to.

On the Peptonization of Albuminoids.

In a paper read by Bovet at the Soc. de Therap. he says the fact that a certain article of food is rich in albuminoid substances, does not prove that it is completely utilized in the organism. Certain toxic materials are present in the food, which are not only not assimilated, but are even dangerous. A series of experiments made by him demonstrated that pepsine does not always display its highest peptonizing power, but that this depends upon the substances to be peptonized. Hydrochloric acid digests principally milk and vegetable albuminoids. The author's object has been chiefly to demonstrate that vegetable albuminoids may advantageously replace meat as a food.—*Progres Medical.*

Purulent Periostitis Due to the Typhoid Bacillus.

Achalme reported to the Soc. de Biol. (*La Tribune Med.*) the case of a patient who in the beginning of convalescence from typhoid fever developed an osteo-periostitic abscess of the inner surface of the left tibia. A micro-biological examination of the pus demonstrated the presence of the bacillus of Eberth. The absence of all other microbes, as well as the identity of the typhoid bacillus, were established beyond a doubt by cultures and inoculations. In this case the bacillus of Eberth seemed to be the sole agent that could be held responsible for the suppuration.

The Presence of the Virus of Rabies in the Saliva Before the Appearance of Symptoms.

The opinion generally entertained among the public is that the bite of a rabid animal is dangerous only when he shows symptoms of hydrophobia. Now, as a rule, there are prodromic symptoms, which are easily overlooked. It is now also well known that a rise of temperature occurs several days before the appearance of violent symptoms; this is the first manifestation of the disease, for at the time when an elevation of temperature is first made out, the animal does not present any change in his manners, not even to an experienced observer. A series of experiments, made by Roux and Noerd, have demonstrated the fact that at least three days before the animal shows any change of temper, the saliva may contain the virus of hydrophobia, and produce all the symptoms of the disease in animals inoculated with it. The conclusion is evident that a dog may present all outward signs of health, that he may eat and be in his usual mood, and yet carry the virus of rabies in his mouth. If he should bite a person, or the animal's saliva be otherwise inoculated, for instance, by licking an abraded surface, he may communicate the disease to the person, although the dog himself would not seem to be affected at all.—*Jour. de Med. et de Chir. Prat.*

On Tumors of the Bladder.

Prof. Guyon spoke on this subject at one of his clinics (Hopital Necker). It is known that hæmaturia is an almost constant symptom during the evolution of vesical tumors; it may be absent, however, but so rarely is this the case that Guyon found this symptom wanting only in three cases out of a large number of tumors that came under his observation. In a majority of cases it

is a predominating symptom, necessitating early intervention. The following case forms an illustration of this necessity:

A patient recently admitted had hæmaturia continually for three months, it having resisted all kinds of medication, so that when this man decided to be operated on, he was in such a weak condition that he succumbed to the shock of the operation. A point of special interest in this case was that only a small pedunculated tumor, the size of a lentil was found in the bladder. The autopsy showed that no other lesion existed. Here there was a tumor of insignificant size, which, however, caused the patient to be reduced by continued hæmorrhages to such a state of prostration, that he was unable to bear an operation. It is dangerous to let patients of this sort lose blood for too long a period. If this patient had been operated on in time, in all probability a good success would have been obtained on account of the small size of the tumor, and by reason of its being pedunculated.

Another patient began to bleed two months before admission; hæmaturia persistently continued up to the day of the operation. In this case the extirpated tumor was half the size of a hazelnut; but from this time on not a drop of blood was found in the urine, and the patient recovered. From this the conclusion may be drawn that when there is persistent hæmaturia, which has resisted all kinds of medication, we must operate as soon as possible. Moreover, hæmaturia is nearly always the first symptom of tumors of the bladder. Another patient, recently operated upon, had hæmaturia for the first time seven years ago. After this he had no hæmorrhage attracting any attention until last year. When operated upon, a tumor of considerable size was found in his bladder, and beside some small papillomatous tumors situated about the neck of the bladder, which had given rise to some bleeding at the end of micturition. The amount of hæmorrhage in this case did not corrrespond at all with the size of the growth. Another tumor, extirpated a short time ago, had also given rise to hæmaturia of but little importance, while the above-mentioned tumors, weighing only a few grammes, had exhausted the patients by continual hæmorrhages.

It is demonstrated by histological examinations that nearly all these tumors are epitheliomata and not papillomata, which fact corresponds with the clinical history, the recurrence of the tumor, sooner or later, being the rule. This does not prove that an operation is contraindicated: on the contrary, the indication is to operate as early as possible, especially when persistent hæmorrhages are undermining the patient's strength.—*Jour. de Med. et de Chir. Prat.*

Injections of Lanolin in Urethritis.

Lanolin has the property to adhere well to mucous membranes, which has induced Dr. Stern (*An. de Dermat.*) to use it diluted with oil, as an injection in urethritis. He gives the following formula:

1.	Anhydrous lanolin,	1 oz.
	Sweet almond oil,	3 oz.
2.	Sulphate of zinc,	8 grains.
	Anhydrous lanolin,	5 drachms.
	Water,	1 drachm.
	Sweet almond oil,	2½ oz.
3.	Salicylic acid,	4 grains.
	Anhydrous lanolin,	6 drachms.
	Sweet almond oil,	2½ oz.

The first one of these solutions is left in the urethra from 5 to 10 minutes; it has an antiphlogistic action; the author, therefore, prescribes it in the very acute stage; eight or ten days later he adds an antiseptic or an astringent, and he concludes the treatment by using an injection of a 1½% aqueous solution of resorcin.—*Jour. de Med. et de Chir. Prat.*

Treatment of Sciatica and other Neuralgias.—Mordhorst (*Therap. Monat.*, June, 1890) states the diagnosis of sciatica is not always easy, and that inflammatory thickening of the rectus femoris and vastus externus may be mistaken for this condition. It may also be confounded with rheumatic affections of the trochanter major, and the muscles covering the hip-joint, especially the tensor vaginæ femoris, in the tendon of which may be found small masses varying in size from a lentil to a bean. These may be mistaken for true punctata dolorosa, as they are painful upon pressure. In many of these cases the author has found an excess of free uric acid in the urine, and so concludes that these masses are urates deposited in the tissues.

With these few remarks on diagnosis, the author takes up his special methods of treating sciatica, which he has employed for the past four years, and for which he claims the best results. In cases of neuritis—most of these cases belong to that class—it is well, he says, to begin with a hot bath of from fifteen minutes to one hour's duration, followed by rest in bed of at least one hour, after which electric massage is to be used after the author's method. This consists of the application of the cathodal electrode having a surface area of at least 100 sq. cm. to the sciatic notch, while a revolving cylinder connected with the anode is passed down the limb along the course of the nerves. Deep pressure is made when the electrode is drawn downward, but it should only touch the skin lightly when returned, to prevent a break in the current. The author says that strong currents (from 5 to 10 milliamperes) can be used in this manner, with a corresponding rapid absorption of inflammatory exudate.

Of 36 cases of sciatica treated in this way, 30 recovered, and 6 were improved. One case was cured in eight days, but the average length of treatment was from three to six days. Of 13 other neuralgias, 10 were cured and 3 improved.—*Jour. of the Am. Med. Ass'n*, July 26, 1890.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, SEPTEMBER 27, 1890.

PUBLISHER'S CARD.

It affords us pleasure to know that the profession in the North and Southwest appreciates a WEEKLY Medical Journal published in the West, although five years ago when we first commenced to issue the REVIEW as a Weekly Journal many of our good friends (who are always willing to give advice) prophesied it would be a matter of but a short time when we would cease to issue *weekly*. We are now happy to be able to realize such prophesy has not proven true, but on the contrary, THE REVIEW not only continues to be issued weekly but has been greatly enlarged in size and increased in literary work, although the price remains the same ($3.50 per year.)

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CELEBRATION OF THE SEMI-CENTENNIAL OF THE MISSOURI MEDICAL COLLEGE.

The Missouri Medical Alumni Association held a preliminary meeting at the Polyclinic building on September 22, for the purpose of discussing measures for the appropriate celebration of the semi-centennial of the college. It was decided to hold a special meeting for the same purpose on October 9, next, and the following letter, presented by Dr. W. J. Langan, was approved; signed by many of the faculty, and by a member of each class for the last twenty years, it will be sent to every alumnus of the College:

"The meeting on October 9 is for the celebration in a fitting manner of the fiftieth anniversary of our beloved alma mater. We now believe that the end of the present session, at the commencement exercises in March, 1891, will be a most propitious occasion, since with the present session our alma mater concludes, full of prosperity and in the acme of her usefulness, her fiftieth session. The more so do we deem the occasion a proper one, because this year marks an era in the history of our school, with vastly increased facilities in the addition of spacious buildings, thoroughly equipped chemical, histological and biological laboratories. She now exacts a three-year attendance at her lectures. For years she has been among the foremost to urge this progress, but has now only been enabled to carry it into effect, having the support of the State Boards of Health of several States. You are now one of an army of over 2,000. Act with us, and assist in molding public and professional opinion toward progress in our profession, and join us in order to make our semi-centennial celebration an event of national bearing."

This movement is one which should have not only the hearty approval, but the *active assistance* of every

alumnus of the College, to make it a celebration commensurate with the age, prominence and honorable standing of this institution. It should bring together, in happy and brotherly conclave, the many who have gone forth, from years afar back, to battle with disease, and who, on account of the unceasing nature of that fight, have been unable to return and view for themselves the great strides that have been taken, in their absence, by their beloved alma mater.

Let them return on this memorable occasion, and under the inspiring influence of each other's companionship, retrace the years that have frosted hair and brought wrinkles, to be "students" again; throw physic (that is, the practice of it) to the dogs, and imagine themselves once more the gay and festive boys as of yore, with a *penchant* for playing practical jokes, for singing "John Brown's Body," for destroying things in general, but banquets in particular.

Let this be an opportunity for the old and the young children of the alma mater to become acquainted—an opportunity which has never before been presented, and will not again be offered for a half-century.

Come to the meeting of October 9. Do not hold back, or expect some one else to take your place; *bring him with you*, and bring with you, also, suggestions, advice, energy and a determination to participate actively in the session.

The Treatment of Neuralgias with Methyl Chloride.

Dr. J. Skinner has for the last year and a half employed methyl chloride in the treatment of neuralgias and allied troubles (*Deutsch. Med. Woch.—Centr. f. d. ges. Ther.*). The drug is a gas, but becomes a fluid under the pressure of four atmospheres. This fluid on being released in a spray changes to the gaseous form, cooling the surroundings to a temperature of —6° F. On this fact rests the therapeutic value of the drug in the idiopathic neuralgias, for we may assume that the rapid cooling off of the skin is accompanied by a lessening of the irritability (or inflammation?) of the cutaneous nerves, thus causing a cessation of the neuralgic pains. In order to use methyl-chloride in the manner indicated, copper syphons have been made, capable of resisting a pressure of twenty atmospheres. A spray tip fastened to the opening of the syphon allows the drug to escape, on opening the stop-cock, in the form of a dense cloud, which is allowed to reach the painful parts of the body, the syphon being held 1½ to 2 feet distant from the skin, and rapidly moved from one part to another. The drug often forms on the body in the form of a fine snow, becoming solid by rapid evaporation, but in all cases the skin becomes very cold. The effect is often seen in the complete disappearance of the neuralgic pains, or in many cases the patient is able to move parts of the body (for example, the leg), which it was previously impossible to stir without the most extreme pain. The author gives a number of cases illustrating the advantages of this method of treatment, the credit for the discovery of which is due to Prof. Debove, of Paris.

The results were also favorable in a case of extreme hyperæsthesia of the perineal and scrotal regions, and in a case of excessive pain in the hip following a railway accident. There is little or no danger connected with the use of methyl chloride, for gangrene does not appear even after the most powerful application; the worst result is a reddened surface of skin which tingles for ten or fifteen minutes, and on repeated applications the superficial layers of the epidermis separate painlessly.

The Treatment in Epithelioma of the Lip.

Dr. Zielewicz believes that more descrimination should be employed in the treatment of epitheliomata of the lower lip (*Deutsch. Med. Woch. Centr. f. Ther.*). He distinguishes between the early form, confined to a small surface area, and those forms which involve the whole lip, and necessitate the performance of a plastic operation to cover the defect after extirpation.

In tumors of the first class, early operation and complete removal is generally acknowledged as the most rational proceeding. As regards the second class, of far advanced tumors, he has gradually come to the conclusion that the bloody operation, usually carried out, is by no means the most suitable one, for in such cases the disease generally recurs, and a repetition of the previous operation is rendered impossible by the large area involved in the disease. The author's experience in such cases has taught him that patients with advanced epithelioma of the lip are more injured than benefited by the surgical treatment usually adopted.

Impressed with this idea, he has in the last few years treated such cases conservatively. He separates the tumor from the surrounding parts by thrusts of a sharp, powerful galvano-cautery, extending through the whole thickness of the lip. Partial necrosis of the tumor follows this preparatory operation, after which the entire mass is removed by the galvano-cautery knife, following the boundaries previously marked out. After the scab following the application of the cautery has fallen away, the surface of the wound is treated with an 8% solution of lactic acid.

According to the author, this method of treating epithelioma of the lower lip offers the following advantages:

It lessens the danger involved in a bloody extirpation and the plastic operation following, of an early and rapid recurrence.

The other advantage, which is not quite so apparent to us as to the author, is the removal of the most annoying accompaniments of the tumor, the patient can ingest food more easily, and his presence in business intercourse is again rendered endurable for a certain length of time.

The Conviction of Gun Wa.

The following is a copy of the first count of the charges brought against Gun Wa in Milwaukee, and the one to which his representatives plead guilty.

Mention was made in last week's Review of the fact that Gun Wa and his managers had been convicted of fraud, etc., in the Milwaukee Courts. We herewith present the first count, pruned of many of its legal phrases, to which they plead guilty.

The Milwaukee *Daily News* is said to have been the instigator of the proceedings—strange as it may be to hear of a daily paper cutting off its advertising patronage in that way.

"The said defendants J. A. Wilt, C. A Jeancon and Jim Lee, being then and there *evil disposed* and *dishonest persons*, and wickedly devising, contriving and intending falsely, unlawfully, fraudulently, craftily and unjustly, and by divers means to cheat and defraud the public of the city and county of Milwaukee, did then and there falsely, fraudulently and unlawfully conspire, and agree together to fraudulently hold forth and represent the defendant, Jim Lee, a Chinaman, and various other Chinamen, to this informant unknown, by and under the false and assumed name of Gun Wa, as a Chinese physician and doctor, and graduate with high honor from various medical colleges and universities in China, and that the said Jim Lee had received a diploma from the emperor of China with his signature attached, that he had practiced medicine for over thirty years, that he was a descendent from a family, the male child of which had for sixteen generations back been educated for the medical profession, that by the sole means and use of roots and herbs imported by him directly from China, he was enabled to cure diseases."

"Whereas, in truth and in fact, the said defendant, Jim Lee, is not now and was not then, a Chinese physician and doctor and graduate of any of the aforesaid Chinese medical universities and colleges, and was not then and there a member of any state, county or medical society legally organized in this state, but that in truth and in fact he, Jim Lee, *is a common gambler, laundryman and bartender;* that he had not by the use of Chinese roots or herbs or by the use of any other roots or herbs the ability to cure or heal diseases; but that did then and there, and does now *unlawfully compound roots*, herbs and medicines, for his practice as aforesaid, purchased in said city of Milwaukee, and mainly produced on American soil; that in truth the said Jim Lee *has no knowledge of medicine or compounding* of the same, and whereas, in truth J. A. Wilt, and C. A. Jeancon can not speak, or understand the Chinese language,and cannot interpret from the English to the Chinese language, that the said defendants unlawfully conspire, to, for the purpose of, and with intent to *deceive, cheat*, and *defraud* the public of said city and county of Milwaukee out of its goods, chattels, monies and property."

Further Report on Johnstone.

We wish to keep our readers posted on advances psychological,and therefore chronicle the latest performance of Johnstone, the new candidate for mind-reading fame, who was mentioned in last week's Review. By late tests he claims to have disproved the theory that man has but five senses, and likewise the belief that mind reading is but a species of muscle-reading.

His experiment was that of opening a difficult combination safe, and it was done in the presence of many well-known people at the Wellington Hotel, Chicago.

He was first blindfolded and the bandages thoroughly examined by a committee. His ears were packed with cotton, so it was impossible for him to hear; then his nostrils were similarly filled to destroy, for the time being, the sense of smell, and finally his hands were covered with thick kid gloves to disprove the theory of muscle reading. In his mouth he held a lighted cigar, so that even the sense of taste was temporarily destroyed. The proprietors and book-keeper of the hotel then took a position behind him, and while Johnstone turned the knob of the safe they were requested to think of the combination. Without touching either of the gentlemen the mind reader turned correctly to the numbers and swung the door open. Johnstone declares that his idea in opening the safe under such peculiar conditions was simply to prove that man actually possesses more than five senses, and that science is in error. In conversation the mind reader couples his performance to day as in some respects comparing in importance to the scientific world with the discovery of the circulation of the blood or the law of gravitation.

MEDICAL ITEMS.

"How Often should the baby nurse its mother?" is the subject of a dissertation by a recent writer. We have not arrived at any precise schedule on this point, but we should think not quite so often as the mother should nurse the baby.

In Giving Iodine or the iodides internally for a considerable of time, unpleasant symptoms often develop as a result, and it is a fact not generally known that these may be avoided by the daily administration of 15 to 20 grains of sodium bicarbonate.

A Fallacy.—Dr. J. B. Mattison, of the Home for Habitues at Brooklyn, N.Y., writes us that the statement that has been going the rounds of the journals to the effect that tincture of iron added to the urine will give a blue tint if morphia be present, is untrue.

Pambotano in Malarial Fever.—According to the *Deut. Med. Woch.*, Dr. Dujardin-Beametz, at a meeting of the French Academy of Medicine, proposed as a substitute for quinine the bark of pambotano. The inves-

tigations of Dr. Valude show that a decoction made from this has been successfully used in intermittent fever, and that favorable results have been obtained in cases where quinine has proven ineffectual.

A Fat Woman.—A girl, æt. 19 years, and weighing 470 pounds, has recently died in the Quartier de Plaisance, Paris, from an attack of erysipelas. She was 5 feet 7 inches in height, and measured 88 inches around the waist, 35 inches around the arm, and 42 inches around the thigh at the junction of the upper and middle third.

In attestation of his eminent ability as a chemist, Dr. James A. Lydston, late Chief of the Eye and Ear Department of the Pension Bureau at Washington, has been elected Professor of Chemistry in the Chicago College of Physicians and Surgeons.

We take pleasure in tendering our congratulations to both parties.

Certificates of Health for Bakers.—A new regulation has just gone into force in Odessa, which requires that master bakers must receive from their workmen certificates of health before giving them employment; a similar regulation regarding butchers has been in force for some time. The idea is one that might be copied with advantage.

Adoption of the Metric System.—The Committee on Revision of the Pharmacopœia, at its late meeting, adopted finally and absolutely the metric system of weights and measures, to the exclusion of the older ones. "That is," says Dr. Curtman, "to the exclusion of all excepting the *dram*. As long as whisky retains its present prominent place in society, the dram will remain."

Prizes for Essays on First Aid to the Injured.—The French Society of Hygiene offers a gold medal of the value of $40, a silver medal, and two bronze medals for the best essays on the following subject: "The Treatment to be Carried Out before the Arrival of the Doctor in Case of Accident Occurring in the Street or in Workshops." Particulars may be obtained from the Secretary, 30, Rue du Dragon, Paris.

Child Suicides.—Since Jan. 1, 62 children, 46 boys, and 16 girls, have committed suicide in Berlin. Of this number 24 had attained the age of fifteen, 14 their fourteenth year, 9 their thirteenth, while 7 were only twelve years of age, and one had not attained the age of seven. In most of the cases the immediate cause for the act remains a secret, but it is supposed to have been due to exceptional severity on the part of servants or teachers. —*Med. Rec.*

A Cigarette Four Months in the Lungs.—Dr. Lapeyre, in the *Journal de Medecine*, Aug. 17, 1890, relates an astonishing case of a man, who, startled by a slap on the back, inspired into his trachea a lighted cigarette, did not know what had become of it, kept it in his lungs four months and then coughed it up in the presence of two friends. Dr. Lapeyre is not said to be connected with the marine service of his country.—*Med. and Surg. Rep.*

Naphthol in Surgery.—For surgical purposes Dr. Poirson (*Revue de ther. med. Chir.*) recommends naphthol in the following mixtures:

1. Naphtholi β, .75, Tr. camphor, 1.0, Collodii flexilis, ad. 10.0. This is an antiseptic occlusion dressing, and may also be employed in erysipelas and variola.

2. Naphtholi β, 1.0, Tr.camphor., 2.0, Glycerin, 200.0. This may be employed in general surgery as a dressing, as in case of war.—*Deut. Med. Woch.*

To Test Drinking-Water.—A test for the purity of drinking-water is given as follows by Prof. Angell, of the Michigan University: "Dissolve about half a teaspoonful of the purest white sugar in a pint bottle completely full of water to be tested, tightly stopped; expose it to daylight and a temperature up to seventy degrees Fahrenheit. After a day or two examine, holding the bottle against something black, for floating specks, which will betray the presence of organic matter in considerable proportion.—*Practice.*

The Transmission of Morphine in Mother's Milk.—Dr. Pinzani (*Gaz. d. Osp.*) experimented on twelve nursing mothers, giving full doses of morphine or laudanum per os, and injecting morphine subcutaneously. It was not proven, clinically or chemically, that the drug was transmitted from mother to child through the milk in any case. He does not believe, therefore, in the authenticity of the various isolated observations reported from time to time, of toxic symptoms appearing in a nursing child to whose mother the drug has been given.

Cholera Infantum in the Pharmaceutical Association.—We are informed that at the recent meeting of the Pharmaceutical Association, and of the Committee for the Revision of the Pharmacopœia at Old Point Comfort, an epidemic of diarrhœa—or "cholera infantum," as it was jocosely styled by some—prevailed to the extent of about 200 cases. It was excited by the use of cistern water contaminated with sewage.

It is said that the business of both conventions was materially delayed on account of the numerous and urgent calls of the members "to see a man."

Salt in Milk for Children.—Dr. A. Jacobi (*Arch. of Ped.*) says that the addition of sodium chloride prevents the solid coagulation of milk by either rennet or gastric juice. The cow's milk ought never to be given without table salt, and the latter ought to be added to a woman's milk when it behaves like cow's milk in regard

to solid curdling and consequent indigestibility. Habitual constipation of children is influenced beneficially, since not only is the food made more digestible, but the alimentary secretions, both serous and glandular, are made more effective by its presence.—*J.A.M.A.*

THE DIFFERENTIAL DIAGNOSIS OF NEURASTHENIA.—Among 320 subjects of cerebral neurasthenia Dr. Pelizæus (*Deut. Med. Zeit.*) found 11 (10 males, 1 female) who presented no other sign of organic disease save a difference in the pupils. One-sided dilatation was observed, in some cases affecting one eye only, in others passing from one side to the other. In these cases the general condition was very poor. In six cases the permanent disappearance of this symptom was noted after the subsidence of the general nervous symptoms. Pelizæus therefore thinks that a difference in the size of the pupils should be included among the symptoms of neurasthenia.

FOR INGROWING NAIL.—In *Muench. Med. Woch.*, Dr. Purckhuber recommends a simple but well tested treatment for ingrowing toe nail. The portion of nail to be removed is moistened with a warm 40% solution of potash. After a few seconds the upper layers of the nail become so soft that they may be easily scraped off; for this purpose a sharp piece of glass is preferable to a curette. The affected side of the nail is repeatedly moistened and scraped until it is as thin as paper, when it is picked up with forceps, lifted out of the tissues which have grown over it, and cut off from the healthy side with scissors. This little operation can be completed in half an hour, is unaccompanied by pain or hæmorrhage, and frees the patient from his trouble without an hour's loss of time from business.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENT.

EUREKA SPRINGS, ARK., Sept. 21, 1890.

EDITOR REVIEW:—In my last communication I promised to say something of the now famous Eureka Springs as a health resort. Leaving St. Louis at 8 P.M., in a palace car on the "Frisco" railroad, you arrive at Eureka Springs the next day at 11 A.M. High up, 2,000 feet above the sea level, amid the stately pines of the Ozark mountains, and about the same latitude of Nashville, Tenn., is the greatest all-the-year-round health resorts of the entire South-West. Many a poor emaciated invalid, broken by disease and weary with long miles of travel when first breathing the pure mountain air and drinking the still purer waters here, has exclaimed "Eureka!" with, I imagine, much the same emotions that inspired old Archimedes as he ran through the streets of his adopted city fresh from his bath-tub, all unconscious of his perfect nudity, and thinking only of his wonderful discovery, without which our modern philosophy would need entire revision. I shall not attempt a description of the picturesqueness of the surrounding scenery, so often portrayed by abler pens than mine. We are told that "nature abhors a vacuum," but if there are no health giving properties in the pure waters that pour from 46 crystal springs upon the mountain sides within a radius of two miles, furnishing 250,000 gallons every day, then nature has made the next thing to a vacuum, as the surrounding country is fit for habitation only as a health resort. Any one who saw Eureka Springs in its primitive days and now visits it will be amazed at the wonderful expenditure of money in order to add to the beauties of nature here. It has been a question in the debating societies of all the country schools in the land, "Which are the more beautiful, the works of Nature or the works of Art?" The question is solved in Eureka Springs. The decision is reached, a compromise is effected, and the universal verdict is that in a combination of the two the climax of beauty is attained.

A little city of 4,000 inhabitants and with 20,000 visitors annually, has bloomed upon the sides and tops of the mountains, embracing within its limits paved streets and alleys, beautiful drives, foot-paths, caves, grottoes, parks and pleasure resorts almost without number, at once affording the luxuries and usual pleasures and comforts of metropolitan life and still retaining all the pristine purity of country seclusion. Here the scion of wealth can get full returns for his lavish expenditures, while the man of moderate means and the poor man will find the best accommodations for the least money of any health resort in the land.

The days of the "Branchwater Man," so graphically portrayed by Dr. King in his "Stories of a Country Doctor," have passed, and a feeble effort at medical legislation by the state of Arkansas has driven out most of the old-time quacks, so that you are not now greeted by the once familiar sign, "Kansers Affectually Cured." Nor does the old and illiterate hag peddle upon the street corners her "yeye-waters" and "skin intments," "biled out from rutes and yarbs of my own diggin'."

Eureka has now some excellent and skillful physicians, and is freer than any watering place within my knowledge of the loathsome "carrion birds" that too often infest the medical profession at such places.

Dr. A. J. Gibbs is probably the oldest (not in years, but in residence) practitioner of the place. A typical Southerner, an accomplished gentleman, and a skillful physician. From long professional labors in the swamps of Louisiana, broken in health, a physical wreck, 10 years ago he came to Eureka. His restored health and physical appearance now would almost excite the envy of an athlete. The doctors here maintain their medical society, and a membership in it is a guarantee of professional skill and integrity. Having once been a practitioner at Eureka Springs, I intended to speak definitely of the medicinal properties of the water here, but my friend, Dr. R. G. Floyd, now a resident physician of the place, has kindly relieved me of the labor.

I venture this final suggestion to the readers of the REVIEW, viz.: in casting about for a climate for patients with incipient phthisis, send them to Northwestern Arkansas. The altitude is promising; the climate is equable; the air is reasonably dry, and the pine hills inspire confidence. In his brief note to me, Dr. Floyd says of Eureka waters:

"The analysis shows that this natural water contains less that 6 grs. of solids to the gallon, without a trace of organic matter. The following diseases are treated here with great success, viz.: Diseases of the genito-urinary system, such as Bright's disease, chronic cystitis, diseases of the mucous surfaces generally, diseases of the skin (notably eczema), rheumatism, and all chronic diseases where there is deficient metamorphosis of tissue. Dickinson, in his work on "Albuminuria" gives the *rationale* of cure by water in Bright's disease, and many who have been treated here successfully attest the truth of his theory. Mental and nervous troubles, cases in which it is necessary to have change of climate, new scenes and freedom from business cares, paralysis and especially gout, dyspepsia, chronic constipation and ulcers of the stomach. Prof. Niemeyer extols alkaline spring-water in the treatment of the above diseases, and says that 'the results from this treatment are the most satisfactory that are ever obtained in medicine.' "

A drive of 50 miles from Eureka over the hills and valleys of Carroll and Boone counties brought me to Harrison, Ark., a beautiful and substantial town of more than 2,000 population in a fertile and healthy country. Harrison is probably the largest and best town in the United States without a railroad, Eureka being the nearest railroad point, and why the present enterprise among railroad builders does not build to such an inviting point is beyond the ken of the present writer. Harrison has five excellent physicians. Of these, Dr. L. Kirby, Dr. A. J. Vance, Dr. L. C. Tyson and Dr. S. P. Green are constant readers and admirers of the REVIEW. More anon, J.W.L.

NEW YORK, Sept. 13, 1890.

EDITOR REVIEW:—I have just noticed in the REVIEW, No. 470, that you infer that the Roosevelt Out-patient department is treating patients who could pay a moderate fee to physicians. I can only answer for the surgical department, but I am convinced that my efforts to prevent any such misuse of the clinic have, in the main, been successful. We do not strive with the Vanderbilt Clinic for greater numbers of patients—we have more than we can attend to in the time allotted us. It is our rule to inquire about this very thing of every one we suspect, especially in all cases where they have been treated before coming to us. This is a very difficult matter to manage without a failure now and then, but you can be assured that our efforts to prevent just this misuse are not ineffectual. I refer, daily, patients to physicians and surgeons in the city who have, either through ignorance or designedly, applied to the hospital for treatment instead of calling upon a physician not connected with the institution.

FRANK HARTLEY, M.D.,
Attending Surgeon, Out-Patient Department, Roosevelt Hospital.

BOOK REVIEWS.

GUNSHOT WOUNDS OF THE ABDOMEN. By Aug. Schachner, M.D., Louisville, Ky. Pamphlet. Reprinted from Annals of Surgery, June, 1890.

This monograph is the result of studies both in a clinical and experimental way, in which he deduces many rules and principles for assistance in the solution of the many problems yet remaining in this most interesting field of surgery.

The experiments were divided into three classes: gun-shot wounds with interference, without interference, and of separate organs.

The first class, comprising 32 experiments, gave 17 recoveries, 45 per cent.; (one experiment in which death followed immediately is omitted). In all except 4 of the remaining 14, terminating fatally, death occurred during or at the end of the first 24 hours after operation. Death followed in one and a half, three, three and a half, and four and a half days respectively in the four above excepted. The cause of death was as follows: Two from hæmorrhage, 14.2 per cent; five from shock primarily, 35.7 per cent; six from sepsis, 48.2 per cent; and one from shock consecutive to an operation for obstruction.

The second class consisted of five. These went without operation. One recovered. Death resulted in one from shock; in two from hæmorrhage; in one from sepsis. The author thinks the recovery of one animal due to the probable slight injury.

The third class includes four resections, after Wolfler's method, a partial resection of the liver, a partial resection of the spleen, and one experiment upon the peritoneum. All recovered. Lastly a final experiment with Senn's test. As a result of his experiments, the author makes the following deductions:

1. In view of the uncertainties which attend these injuries, exploratory laparotomy should in every case be boldly but carefully performed, the operator being in readiness to meet any indication that the exigency of the case may demand.

2. Laparotomy in the linea alba is preferable to one performed in the course of the ball, unless there are reasons to believe that the ball became arrested short of the peritoneum, or its track infected, in which case incision and drainage should be employed.

3. Considering the objections against Senn's test as a diagnostic means of determining the necessity of a laparotomy, the possible harm outweighs to such an extent the possible benefit, that its general adoption is hardly justifiable.

4. The value of Senn's method in determining at the

close of the operation the security of the intestinal tract is questionable and still *sub judice.*

5. Large intestinal wounds, not involving the mesenteric border, are best treated by partial resections.

6. Intestinal wounds upon the mesenteric border, unless very small, require a complete resection.

7. Where several large wounds are situated very close together, a single resection, including them all, should be considered.

8. Partial resections of the liver, spleen, or pancreas, are feasible steps, and may be required.

9. Suturing of both openings in wounds of the liver and spleen for the arrest of hæmorrhage is advisable.

10. Excepting superficial lesions, nephrectomy is the only procedure in wounds of the kidney.

11. Should obscure symptoms arise pointing to an early peritonitis, the use of salines is indicated.

12. If suppurative peritonitis is established, early exploratory incision, drainage and disinfection of the peritoneum should be undertaken.

BOOK REVIEW.

Saunder's Question-Compends, No. 14. Illustrated. Part I. Essentials of Refraction and the Diseases of the Eye. By Edward Jackson, A.M., M.D. Part II. Essentials of Diseases of the Nose and Throat. By E. Baldwin Gleason, S.B., M.D.

This is a compact and convenient little volume, arranged in the form of questions and answers.

It is not designed for the specialist, but aims to present the essential points of the subject in such form that they may be easily acquired by the student, thus enabling him to enter with more advantage upon a special course of study, and also to serve as a guide to the practitioner who may be called upon to treat disease of the eye, nose, or throat, without the advantage of special instruction.

For this purpose its form is well adapted and it will doubtless prove useful to those for whom it is intended.

Each part contains a list of useful formulæ and an independent index at the end of the book.

The make-up of the volume is excellent, the type being clear and the paper and binding good. The illustrations are well selected and serve greatly to condense explanation.

The book is from the press of W. B. Saunders, Philadelphia.

LITERARY NOTES.

The *Annals of Surgery* for September comes with the usual number of instructive monographs and editorial articles. "The Operative Treatment of Goitre," by Dr. Wm. Waldo Van Arsdale, which heads the list, is a comprehensive treatise on that subject, and the immense bibliography appended shows the amount of attention which has been given it by the author.

Amongst other interesting topics treated of, we notice those on Recent Scandinavian Contributions on Tuberculosis of the Knee-Joint, and Its Surgical Treatment (editorial); New Method of Performing Gastro-ostomy, by Hahn; reports on progress in the Surgery of the Nervous and Vascular Systems, of the Head and Neck, and of the Abdomen.

Published by J. H. Chambers & Co., St. Louis.

SELECTIONS.

Recent Progress in Practical Obstetrics.—(*Der Frauenarzt*, v., 6.) O. Roth, the author, begins with reviewing the success following antisepsis by corrosive sublimate. In his own hands he has had none but gratifying results from the use of this agent; he has never seen a case of intoxication follow its employment. He feels confident that the use of this agent may be supplanted by less heroic measures in hospitals and clinics, but not in private practice; here we do not see the patient generally until the hour of delivery, when labor has often lasted for some time and the genitals have been manipulated by a midwife or other attendant; we have no control over the hygienic surroundings of a great many of the patients. He used a solution of 1:1,000; he used it in 204 cases, which comprised, however, only cases of operative obstetrics. The external genitals were first washed with soap-water as warm as possible, then rubbed with about a pint of sublimate solution, and the vagina irrigated with the same. Of these 204 cases, 5 died. The contra-indications to the use of bichloride are, according to Kehrer: 1, antecedent symptoms of mercurialization; 2, acute anæmia; 3, renal affections; 4, intestinal catarrh; 5, large vaginal, perineal, or cervical lacerations; 6, atony of the uterus. The author says we may safely discard the last two, and employ the agent with impunity.

Roth has made use of tamponade of the uterus (with iodoform gauze) in six cases; in four there was atony of the uterus. The tampon readily controlled hæmorrhage. He employed gauze containing 50% iodoform; he introduced it without instruments, fixing the uterus externally with the left hand and pushing the gauze up with the right. He allowed it to remain *in situ* until the uterine contractions forced it into the vagina, or sometimes externally; this occurs from the fourth to the sixth day. The tampon removed after-pains, or greatly mitigated their violence.

The author considers the introduction of axis traction forceps as an important step forward in obstetrical art. In cases of high position of the head, the extraction is simplified and its duration lessened by the use of Tarnier's forceps.

Concerning the continuous catgut suturing of ruptured perineum, at first introduced by Schrœder, the author had had only the most satisfactory results, good

union following in every case where it was employed; he used juniper-oil catgut. He also considers the practise of incising the cervix in case of deficient dilatation, and believes that this procedure, together with the application of Tarnier's forceps, is capable of saving many infantile lives.—L. R., in *Am. Jour. Obstet.*

Treatment of Epistaxis.—Dr. A. H. Friedenberg, New York, gives, in the *Medical Record*, this which served well in emergency. He say: I had some rubber drainage-tubing, of assorted sizes, on hand, from which I selected a piece of small calibre, but of sufficient resiliency, about the thickness of a parlor match and about ten inches in length. One end of this I introduced into the right nasal cavity, and pushed it along the floor of the inferior meatus, through the clots, until it reached the pharynx, whence it curled forward within easy reach of the forceps, by which it was drawn out at the mouth, meeting the other end projecting from the nose. The subsequent steps were similar to those employed after the passing of the Belocq cannula. To the mouth end of the tubing I attached a small, compact wad of elastic lamb's wool, rolled in iodoform gauze, and drawing upon the nasal end, I slipped the wad into the post-pharyngeal space and stretched the tubing until the cessation of all trickling of blood down the post-pharyngeal wall showed that the post-nasal aperture was occluded. Still keeping the tubing tightly drawn to its fullest extent, I rapidly packed the anterior nasal recesses with long strips of iodoform-gauze to just within the nostril, all around the tubing. I now tied a knot in the rubber, close to its exit at the nostril, and through it passed a cross-piece of tubing of somewhat larger calibre, just long enough to fit easily inside the nostril. Finally, releasing the rubber, its elasticity caused it to fly back, so that the knot and cross-piece rested upon and firmly held in place the anterior gauze packing. The nasal cavities were thus firmly occluded at both outlets, without any external evidence of the tampon, or any unsightly bulging of the soft parts of the nose. The elastic tubing was at just a sufficient tension to support the packing without the least discomfort to the patient. After 48 hours it was easily removed without recurrence of the hæmorrhage, by slightly drawing the knot out of the nostril and cutting the tubing just behind it.

Surgical Shock:—Dr. Cheever, Boston, makes valuable suggestions on modern surgical practice, upon the causation, aggravation or mitigation of shock. He believes that modern methods, while reducing pain and hæmorrhage, have increased the tediousness of operations, the nausea, the exposure while operating, and the consequent low temperature. Primary shock is diminished and secondary shock is increased; nausea is one of the attending symptoms of shock, and is the most dangerous factor in producing anæsthesia. He maintains in regard to anæsthetics that they annul pain at the expense of nausea, and considers it an axiom that anæsthesia does not annul the existing, but only the additional shock which the pain in cutting produces. He insists that the tendency of modern surgery is to prolong unduly operations, patients being frequently one and a-half and two hours on the table, the older methods of quick surgery being abandoned.

The following are the chief rules of treatment suggested for the prevention or alleviation of shock:

Before operation:

1. Wait for reaction.
2. Give alcohol in some form a quarter of an hour before anæsthesia.
3. Anæsthesia to be short as possible.
4. Operation to be as rapid as is prudent.
5. Dressing to be as short as possible.
6. The patient never to be chilled.

After operation:

1. Persistent and carefully applied dry heat.
2. Nutrient enemata.
3. Hypodermic injection of brandy or some other diffusible stimulant.
4. Quiet and rest, with the head low.

—*Practice.*

Suing the Wrong Party.—A young woman, in Summit County, Ohio, was supposed to be suffering from an ovarian tumor coming on, it was alleged, as a result of injuries sustained in a railroad accident. Her suit for damages was still pending against the railroad company when an operation was deemed imperative. The surgeon was somewhat surprssed on opening the abdomen to discover a dead full term fœtus. The railroad company now disclaims all responsibility for the tumor.—*Med. Record.*

Last Home-Seekers' Excursion for 1889.—The last opportunity of the season for inspecting the cheap farming, grazing, fruit-raising, mineral and timber lands of Southwest Missouri, Kansas, Nebraska, Arkansas and Texas will take place October 14. The Missouri Pacific Railway and "Iron Mountain Route" cover all portions of the above States with a splendid service of through coaches, free reclining chair cars, and Pullman Buffet Sleeping Cars. Tickets are on sale at half rates at coupon offices of all connecting lines in the North and East. Descriptive land pamphlets, county and sectional maps, time tables, etc., mailed free to any address. Write to Company's Agent or General Passenger Agent, St. Louis, Mo.

The Louisville Air Line Railroad has given a half-rate fare to Louisville for the meeting of the Mississippi Valley Medical Society, Oct. 8, 9 and 10. This excellent road invariably furnishes first-class accommodations and pleasant service. It is the only direct line to Louisville—in fact, it is the only line to be considered in making the trip. St. Louis office, 103 N. Fifth street.

TABLE EXHIBITING THE NORMAL AND ABNORMAL QUALITIES OF URINE.

I. QUANTITY. (Normal amount per diem, 2 to 3 pints. Average about 40 ounces.)	Increased (60 ounces or more daily.)	Temporarily.	Effects of food or medicine, as nitrite of amyl, alcohol, diuretics, &c. Hysteria. Hydronephrosis.
		Permanently.	Polyuria or diabetes insipidus (low specific gravity.) Glycosuria or diabetes mellitus (high specific gravity.) Incip't Bright's disease Waxy and contracted kidney.
	Diminished (10 or 20 ounces or less daily.)	Apparently.	Distended and paralyzed bladder (retention of urine.)
		Actual decrease (may amount to suppression of urine.)	Commencement of febrile and inflammatory states. Acute nephritis. Renal congestion (from disease or medicines, such as turpentine, cantharides, &c.) Profuse watery discharges from bowels, as in cholera.
II. COLOR. (Normal amber yellow; due to uro-chrome, or urohæmatin.)	High colored.	Dark-greenish brown accompanies biliary pigment (in jaundice and hepatic disorder.) Smoky or reddish brown indicates blood (nephritis, cancer, malarial-poisoning.) Dark red with clots, may be due to bleeding from urethra or bladder (gonorrhœa, vesical calculus, cancer, &c.) Light red, or brownish red is caused by increase of urates stained by urochrome (rheumatism, fevers and indigestion.) Dark brown urine occurs in poisoning by arseniated hydrogen or hydrocyanic acid (Rabuteau.)	
	Pale.	Opalescent (diabetes mellitus). Limpid (excess of water, as in hysteria, polyuria, hydronephrosis, &c.) Straw color, dilute urine, due to the administration of large quantities of water, alcohol or some diuretic. Pale in anæmia and chlorosis. N. B.—Both urohæmatin and indican may be in excess in pale urine. (Da Costa.)	
	Exceptional colorings.	A purple or pinkish hue may by due to *purpurine* or *uro-erythrine* (acute gout, rheumatism, derangement of liver, &c.) Green or blue urine may be caused by the decomposition of indican in alkaline urine (Bright's disease, catarrh of bladder, &c.) Milky urine, in small quantities, *gonorrhœa;* in larger quantities, forming deposit, it is due to *urates;* in rare cases coagula occur, and the case is one of *chyluria.* Rhubarb or santonin make the urine greenish yellow; strong coffee makes it dark colored; tar, creosote and carbolic acid make it smoky or black; logwood makes it red.	
III. REACTION. Normally moderately acid, reddens blue litmus paper. Fresh urine is acid, but in about 24 hours it becomes alkaline by the development of ammonia from the urea.	Highly acid.	Urine generally concentrated.	Oxaluria. Rheumatic or gouty diathesis. Acute rheumatism. Inanition (when no food is taken into the stomach for several hours, the urine is highly acid.) Effects of diet and increase of acids in the system. The administration of benzoic acid and sometimes of the mineral acids.
	Alkaline.	I. Fixed alkali. (Alkaline phosphates.)	Diseases of the nervous system, especially of spinal cord and injuries to the brain. Normal digestion of food makes urine alkaline after a meal. Administration of sodium, lithium or potassium salts.
		II. Volatile alkali (ammonia.) Heat restores the red color of test paper.	Cystitis, with ammoniacal urine. Paraplegia and paralysis of bladder. Stale urine.
IV. SPECIFIC GRAVITY. (Normal from 1.018 to 1.044.	Above 1.025.	Urine pale.	Diabetes mellitus.
		Urine high-colored.	Concentrated urine (increase of salts.) Acute Bright's disease (acute desquamative nephritis.)
	Below 1.015.	Urine pale.	Hydronephrosis. Albuminuria. Diabetes insipidus, polyuria, hysterical urine, children's urine (excess of water.)
		Urine high-colored.	Hæmaturia. Effect of of diuretic drugs, scoparius, jaborandi, &c.

TABLE—CONTINUED.

SEDIMENTS.

I. AMORPHOUS.	Pale or white.	Dissolved by heat.	Urate of ammonia.
	Pink or brownish.	Dissolved by heat.	Urate of Soda.
	White and flocculent.	Rendered gelatinous by liquor potassæ.	Pus.
	Light and cloudy.	Made more fluid and clear by liquor potassæ.	Mucus.
	Dark-red, soot-colored or grumous.		Blood.
II. CRYSTALLINE.	Pink or brownish-red.	Insoluble in acids, but soluble in liquor potassæ.	Uric acid.
	White or fawn.	Soluble in free acids.	Earthy phosphates.
	" "	Insoluble in acetic acid or liquor potassæ, but soluble in hydrochloric acid.	Oxalate of lime.
	" "	Insoluble in acetic acid or potassæ, but dissolved in liquor ammoniæ.	Cystine.

ALCOHOL IN PATENT MEDICINES.

In the report on nostrums, proprietary medicines, and new drugs, which was read before the American Association for the Cure of Inebriates, is found in the appendix the following list of the results of the analysis of a large number of well-known patent medicines, which is of interest not only to the physician, but to the student of human nature, in view of the readiness with which charlatanism can hoodwink persons who in other matters are supposed to have the ordinary quantity of common sense:

	PER CENT OF ALCOHOL.
Dr. Buckland's Scotch Oats Essence, - - -	35.
(Also ¼ gr. morphine to the ounce.) A more insidious and dangerous fraud can scarcely be imagined, especially when administered as this is recommended, for the cure of inebriety or the opium habit.	
The "Best" Tonic, - - - - - - - -	7.65
Carter's Physical Extract, - - - - - -	22.
Hooker's Wigwam Tonic, - - - - - -	20.7
Hoofland's German Tonic, - - - - -	29.3
Hop Tonic, - - - - - - - -	7.
Howe's Arabian Tonic. "Not a rum drink," - -	13.2
Jackson's Golden Seal Tonic, - - - - -	19.6
Liebig Co.'s Coca Beef Tonic, - - - - -	23 2
Mensman's Peptonized Beef Tonic, - - - -	16.5
Parker's Tonic, - - - - - - - -	41.6
"A purely vegetable extract. Stimulus to the body without intoxicating. Inebriates struggling to reform will find its tonic and sustaining influence on the nervous system a great help to their efforts."	
Schenck's Seaweed Tonic, - - - - - -	19.5
"Distilled from seaweed after the same manner as Jamaica spirits is from sugar-cane. It is therefore entirely harmless, and free from the injurious properties of corn and rye whisky."	
Atwood's Quinine Tonic Bitters, - - - -	29.2
L. F. Atwood's Jaundice Bitters, - - - -	22.3
Moses Atwood's Jaundice Bitters, - - - -	17.1
H. Baxter's Mandrake Bitters, - - - -	16.5
Boker's Stomach Bitters, - - - - - -	42.6
Brown's Iron Bitters, - - - - - - -	19.7
"Perfectly harmless. Not a substitute for whisky."	
Burdock Blood Bitters, - - - - - -	25.2
Carter's Scotch Bitters, - - - - - -	17.6
Colton's Bitters, - - - - - - -	27 1
Copp's White Mountain Bitters, - - - -	6.
"Not an alcoholic beverage."	
Drake's Plantation Bitters, - - - - - -	33.2
Flint's Quaker Bitters, - - - - - - -	21.4
Goodhue's Bitters, - - - - - - -	16 1
Hartshorn's Bitters, - - - - - - -	22.2
Hoofland's German Bitters, - - - - - -	25.6
"Entirely vegetable and free from alcoholic stimulants."	
Hop Bitters, - - - - - - - - -	12.
Hostetter's Stomach Bitters, - - - - - -	44.3
Kaufmann's Sulphur Bitters, - - - - - -	20.5
"Contains no alcohol." (In fact, it contains no sulphur, but 20.5 per cent. alcohol.)	
Kingsley's Iron Tonic, - - - - - - -	14.9
Langley's Bitters, - - - - - - -	18.1
Liverpool's Mexican Tonic Bitters, - - - -	22.4
Pierce's Indian Restorative Bitters, - - - -	6.1
Porter's, Z., Stomach Bitters, - - - - -	27.9
Rush's Bitters. - - - - - - - -	35.
Richardson's, Dr., Concentrated Sherry Wine Bitters, -	47.5
"Three times daily or when there is sensation of weakness or uneasiness at the stomach."	
Secor's Cinchona Bitters, - - - - - -	13.1
Shony's German Bitters, - - - - - -	21.5
Sweet's, Job, Strengthening Bitters, - - -	29.
Thurston's Old Continental Bitters, - - - -	11.4
Walker's Vinegar Bitters, - - - - - -	6.1
"Free from all alcoholic stimulants. Contains no spirit"	
Warner's Safe Tonic Bitters, - - - - - -	35.7
Warren's Bilious Bitters, - - - - - -	21.5
Wheeler's Tonic Sherry Wine Bitters, - - -	18.8
Wheat Bitters, - - - - - - - -	13.6
Whitcomb's, Faith, Nerve Bitters, - - - -	20.3
Williams, Dr., Vegetable Jaundice Bitters, - - -	18.5

ORIGINAL ARTICLES.

RUPTURE OF LIVER AND KIDNEY.—EXCESSIVE HÆMORRHAGE.—LAPAROTOMY.—RECOVERY.

BY H. C. DALTON, M.D.,

Superintendent City Hospital, St. Louis.

Chas. F., colored, æt. 28 years, hod carrier, a robust mulatto, was admitted to the City Hospital at 2:15 P.M., July 17, 1890. An hour before admission, while engaged in carrying brick to the top of a building, he lost his balance and fell from the fifth to the third story, a distance of about 25 feet, falling across an iron bar.

The bar struck him over the right lumbar region. Fortunately he caught the bar with both hands, and, although knocked almost senseless, held on until rescued by his fellow workmen.

Great nausea and faintness developed, but he neither vomited nor lost consciousness. When admitted to the hospital on hour after the injury his temperature (rectal) was 100°F., pulse 84 and regular, respiration 38.

Pressure gave considerable pain over the right lumbar and hypochondriac regions. There was no abrasion or contusion at the site of the injury. The urine was drawn and found quite bloody. Percussion gave dullness over the right lumbar region as high up as the axillary line. I considered the dullness due to the hæmorrhage, but did not know whether the blood came from the kidney or from the intra-peritoneal viscera.

As there was hæmaturia I thought its source was most likely renal. The patient's general condition was so good that I did not deem an operation advisable. He was given a dose of morphine and an ice-bag was applied to the right lumbar region.

At 10 A.M., the next day, 19½ hours after the injury, his temperature (rectal) was 102.2, pulse 110, respiration 48. He had suffered considerable pain during the night, was very thirsty, and suffered considerably from nausea, though he did not vomit.

The abdomen was greatly distended and tender to pressure. Percussion elicited dullness (flatness) over both sides of the abdomen, extending well up towards the median line. The hæmaturia continued.

Believing that the hæmorrhage was due to a ruptured liver, I proceeded to perform laparotomy. After thorough antiseptic precautions an incision was made eight inches long in the median line. When the first nick was made in the peritoneum a small stream of blood shot upward to a height of twelve or fourteen inches, due to the great intra abdominal tension. The cavity was full of fluid blood, except in the right dorsal gutter and underneath the liver. At this point was found about a pint of dark, clotted blood.

The belly was thoroughly washed out. To do this I introduced the hard rubber nozzle of a hose throwing a ¾ inch stream, connected to a large reservoir placed 10 feet above the level of the patient.

Passing my hand underneath the liver near its outer portion I discovered a large rent about three inches in length, into which I could place my index finger. Considerable blood was oozing from this wound.

As it was impossible to reach and close it by suture I resorted to the gauze tamponade. A double-handful of gauze was packed around the wound, the end of each strip left protruding from the upper angle of the parietal wound. The belly was closed by interrupted silk sutures involving skin, muscles, and peritoneum. Pelvic drainage was not used.

A remarkable feature of the case was that temperature, pulse and respiration improved during the operation. As stated above, immediately before the operation the temperature (rectal) was 102.2, pulse 110, respiration 48. Immediately after the operation, as soon as the patient was put to bed, the temperature (rectal) was 101.2, pulse 100, respiration 22.

So that *during the operation* the temperature fell a degree, the pulse fell from 110 to 100, and the respiration fell from 48 to 22.

The improvement continued, the temperature never going above 100.5 after the operation. The gauze was removed on the second day. Hæmorrhage did not follow its withdrawal. The hæmaturia ceased in two or three days, and the patient was discharged well August 23, 1890.

In looking back at this case I see where I could have done better in one particular. That is, instead of having the ends of the strips of gauze protruding from the upper angle of the median incision I should have made an opening in the lumbar region for this purpose.

Then, should hæmorrhage have taken place, the fluid would not have had to overcome gravity, and the peritoneal cavity around this region would have been well drained.

It has been my experience, and I presume it has been noticed by others (although I have not seen the statement made), that negroes stand injuries and surgical interference far better than the white race. As a rule this does not hold good in the mulatto.

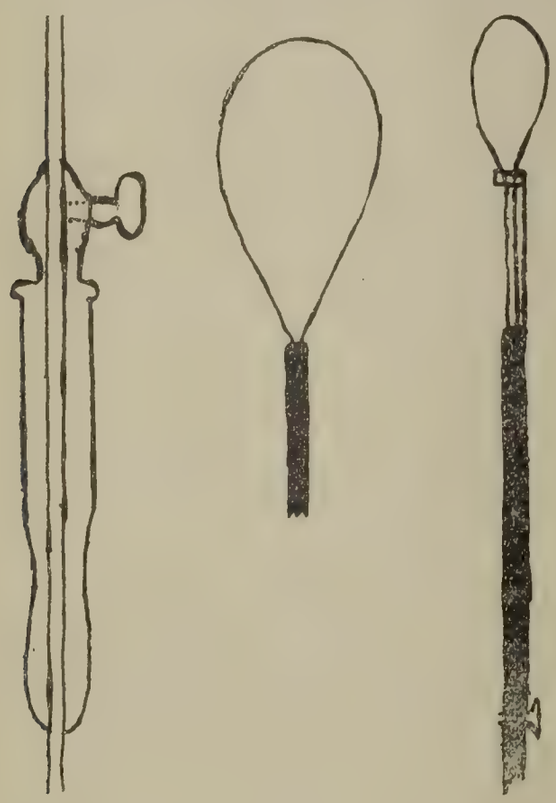
On the other hand, the negro does not compete with his white brother in withstanding diseased conditions other than surgical.

NEW UTERINE CURETTE.

BY F. A. ALFORD, M.D., FERNDALE, CAL.

Being urgently in need of a large-sized curette for a special case, I devised one as follows: Having a universal handle belonging to a cotton-holder, I took the wire of the holder, which is 7¼ inches long, and inserted a loop of watch-spring between the split end, putting in two rivets and soldering up the openings to make it

impervious to blood and septic matter. The spring is $\frac{3}{4}$ inches in diameter, and 1 $\frac{1}{2}$ inches in length inside of the loop. It is $\frac{1}{8}$ inch wide, and the usual thickness of watch-springs. This answered my purpose satisfactorily. If a smaller one is required, a slide could be put over the wire carrying a compressor that will make any size opening down to $\frac{3}{8}$ inch. Any watch-maker being



able to put in the spring in 20 minutes, a set of three or four can be made at nominal cost, thus furnishing the physician with a simple, cheap and effective instrument for removing foreign material from the uterine cavity. The spring being so thin, it will seldom be necessary to sharpen the edge for removing vegetation, etc. I send a rough outline drawing of the instrument. Brass wire is used to hold the spring.

REPORT ON PROGRESS.

DERMATOLOGY.

BY JOSEPH GRINDON, M.D., ST. LOUIS.

Keratosis Pilaris.

All are familiar with the insignificant, dry, whitish or reddish papules frequently to be found about the posterior surface of the arms and external aspect of the thighs from which often issues a stunted, thickened and distorted hair, or which contain within them a hair coiled up like a watch-spring, which slowly straightens itself as the accumulation of epithelial debris composing the papule is removed with the nail.

This condititition, which, as generally met with, hardly constitutes a disease, may at times assume some importance, as when it attacks the face. Most writers make no mention of this latter seat. L. Brocq, in the *Annales de Dermat. et de Syph.*, reviews the literature of the subject in that exhaustive way in which, even among his countrymen, he is easily the first, and calls attention to its occurrence about the sides of the face and superciliary region. A distortion of the pilous system and alopecia of the outer half of the eye-brow may be among the later phenomena; the skin in the neighborhood of the affected follicles may participate in the process and become red, smooth, glazed and atrophic. Brocq believes keratosis pilaris to be congenital. He looks upon ulerythema ophryogenes as a closely allied form.

Bacillary Sycosis.

When, three years ago, Bockkart demonstrated that the ordinary pyogenic coccus was the cause of "non-parasitic sycosis," a great step forward was taken. Twenty years before, the affection due to the presence of the tricophyton had been differentiated from those cases in which no such fungus was to be found. The former became "parasitic," and the latter "non-parasitic," the parasite being still in hiding. Unna has recently shown (*Dentsche. Med. Zeit*) that the latter is subdivided, all cases not harboring the *staphylococcus pyogenes*, but some being due to the presence of a bacillus, which Unna names the *bacillus sykosiferus fœtidus*.

Syphilis and the Hot Springs.

The *Medical Record* contains an excellent article on this subject by Dr. R. W. Taylor, than whom no one is better fitted to speak. After premising that there is nothing in the saline constituents of the waters which would lead us, *a priori*, to ascribe to them great medicinal virtues, he seeks to account for the undoubted benefits arising from their use—in certain cases. The reasons seem to be two-fold in nature. Those which might be classed as positive are, the heat of the water, which, by stimulating secretion, brings about increased tissue change and permits the more vigorous use of specific medication; the change of air and scene, the relief from usual cares, and, more than all, the determination on the part of the patient who has made the pilgrimage for the salvation of his health and life at the sacrifice of time and money, to profit to the utmost by the advantages offered. Evil habits are abandoned and the physician's instructions scrupulously adhered to. Those cases which might be called negative are to be found in the mistakes of ignorance or negligence committed by physicians throughout the country in their treatment of this disease. Amongst those most insisted on by Dr. Taylor are: 1st. Insufficient treatment during the early secondaries. He says: "Indeed, under proper treatment in the vast majority of cases in this, the crucial period of the disease, they may be so benefited, that the backbone of their ailment may be broken." Notwith-

standing he fully recognizes the evils of the "high-pressure system" in which the attempt is made to accomplish in one month what should consume three. This mistaken heroism forms a second cause of occasional unsuccess. A third and a fourth cause are furnished on the one hand by the withholding of mercury after the first year, whereas its use is often still indicated, and on the other by the too early use of potassium iodides, which, in the early rashes, is not only inefficacious, but may very seriously complicate matters by the induction of iodism, and through its irritant effect on the skin and mucous membranes may determine the occurrence of specific deposit. A fifth source of failure is the neglect of that most valuable adjunct, local and regional medication, which will often remove a lesion where systematic treatment would not be borne. Sixthly, the omission of due regard to the patient's general health, which might be favorably affected by tonics, recreating country life and improvement of morals, is chargeable with a certain proportion of failures.

Treatment of Variola.

P. Le Gendre, in the *Coucours Medical*, reviews some of the recent improvements in the treatment of variola.

Du Castel uses ether hypodermatically, giving a Pravaz syringeful morning and evening. Extract of opium is given in large doses, which are still further augmented in case of delirium. His treatment further includes the administration of the tincture of the chloride of iron in full doses. He claims for his method a diminution of delirium and of the typhoid or adynamic tendency, and a favorable modification of the eruption.

Schiermmer has obtained good results with topical antiseptics. A paste consisting of five parts of carbolic acid, forty of olive oil, and sixty of precipitated chalk, was spread over a mask cut out of a piece of cotton or linen so as to fit the face, leaving apertures for the mouth, nose and eyes, and thus applied. Similar cloths were applied to the hands, forearms and legs. This method was tested on over 600 cases and gave uniformly good results as regards desiccation and lessening of cicatrization.

Colleville uses a salve containing 1 part of iodoform to 20 parts of vaseline. He says that pustules recede in two days without forming crusts or leaving pits. Boric acid has been used (Bertrand) for the same purpose.

Diagnosis of Measles.

Sevestre, in *La Semaine Med.*, says that the maculæ of measles appear first behind the ears, where they can be seen for several hours earlier than at any point elsewhere.

The characteristic punctate redness of the velum pendulum he has observed with the outset of the stage of invasion, that is, a day or two before the cutaneous manifestations.

In this connection we may mention the investigations of Duse d'Aristide, published in the *Rivista Clin. e Terap.*, who believes that he has found in frequent washings with warm water and a soap containing boric acid a powerful prophylactic as curative agent in measles.

Potassium Iodide in Psoriasis.

Various articles have appeared in the past year in the European medical press, as well as in our own, on the treatment of psoriasis with the iodide of potassium in massive doses. The method was introduced by Greves and has since found its chief exponent in Hasland. He rapidly pushes up the dose until he gives, in many cases, from 300 to 450 grains a day, obtaining a cure in about 80% of his cases, and more or less improvement in the others. There was no loss of adipose or atrophy of the breasts in women; on the contrary, many gained in weight. Under the above-mentioned full doses, the pulse would generally rise to and remain at 100. No ill effects were noted.

Farunculosis of the Ear.

Cholewa (*Centralb. f. Chir.*) uses for furunculosis of the ear tampons of cotton batting moistened in a 2% menthol solution, to be renewed every 24 hours. The drug acts as a local anæsthetic and will probably prevent relapses due to auto-infection.

Cutaneous Tuberculosis.

Dr. Quénu (*l'Union Med.*) uses a 1 or 2% solution of hydrofluoric acid in water applied on tampons of absorbent cotton. These are allowed to remain for five or six minutes in contact with the diseased surface. The applications are repeated every second day, a carbolized solution being applied on cotton in the interval. The solution must be kept in gutta-percha or leaden containers.

The method gave good results in cases of ulcerating and fungous local tuberculosis which had resisted ordinary measures, in tubercular adenopathy and in general wherever soft parts are implicated. The results in osseous tuberculosis were unsatisfactory.

Bacillus of Warts.

A bacillus has been found in the "prickle layer" of common warts by Dr. Kuehnemann (*Monats. fur Prakt. Derm.*). Is is described as very slender and delicate, occurring both in and between the cells. This fact would account for many curious phenomena which have been noted in regard to these tumors.

Chromic Acid for Sweating of the Feet.

During the year 1888, more than 18,000 Prussian sol-

diers were treated with a solution of chromic acid for sweating of the feet. A 5% solution was applied by means of a brush. The application was made after the feet had been washed and thoroughly dried, and the feet were left uncovered until the acid had completely combined with the skin.—*Therap. Gaz.*

TRANSLATIONS.

PROCEEDINGS OF THE TENTH INTERNATIONAL MEDICAL CONGRESS.

TRANSLATED BY DR. F. NEUHOFF, ST. LOUIS.

Lister on the Actual State of Antiseptic Surgery.

Since Koch made known his method of the culture of microbes on solid media, there has been considerable extension of our knowledge of micro-organisms, and of the means by which the animal organism defends itself against them.

Metchnikoff has demonstrated that the migratory cells nourish themselves like amœbæ and have a special taste for bacteria which they absorb and digest, thus preventing their indefinite propagation. He calls these migratory cells "phagocytes." This theory explains much that seems mysterious in regard to the relation of micro-organisms with wounds. For example, in the operation for hare-lip, the posterior termination of the wound is constantly bathed in saliva which contains numerous kinds of septic bacteria. Yet these bacteria do not penetrate the fibrin which glues together the two cut surfaces, which they certainly would do if the surfaces were composed of a chemically inert surface devoid of life. This is due to the "phagocytic" action of the cells which are present in the lymph soon after its effusion.

This theory also explains why the use of silk ligatures which have not been subjected to antiseptic preparation may not be followed by unpleasant consequences. Zeigler has shown that leucocytes penetrate rapidly into the very small spaces between plates of glass or other foreign bodies which are chemically inert and have been introduced into the tissues. These leucocytes ought therefore to be also able to glide into the intervals among the fibers of the silk thread, and to destroy all the microbes which are able to lodge there.

The successes attained by Bantock and Lawson Tait without the use of antiseptics appear a stumbling block. But in reality the practice of these surgeons is not devoid of antiseptic means. They purify their sponges; they observe strict cleanliness; this is certainly an antiseptic precaution. They wash the peritoneum with pure water in order to free it from coagula without wounding the peritoneal surface by rubbing it with sponges.

The drainage of the peritoneum is another antiseptic measure; moreover, it is necessary to avoid the application of strong and irritating autiseptic solutions to the peritoneum. But it would be wiser to assure, by means of antiseptics, the entire absence of microbes from the hands and instruments; as to the water used for the toilet of the peritoneum, it is better to have recourse to a feeble sublimate solution (1 to 10,000 for example) than to simple boiled water.

In the surgery of the rest of the body, the employment of stronger antiseptic solutions does not present the same inconveniences.

As to the spray, Lister regrets that he formerly recommended it to distroy the microbes of the air. There is not sufficient time for the microbes to lose their vitality in the vapor of the spray.

Since he has abandoned the spray, Lister surrounds the site of the operation with cloths soaked with antiseptic solutions. If, besides the spray, washes and irrigations are abandoned, vigilance ought to be redoubled.

Reasoning, by analogy, from subcutaneous wounds, Lister says that a wound made under antiseptic precautions could be immediately sealed by covering the line of union by an antiseptic varnish. But he claims that carbolic acid by irritation excites a secretion of serum so abundant that its issue necessitates an opening. Hence the drainage of wounds.

After the recent method of treating wounds with sublimate, the secretion is less and drainage less necessary.

As to external dressings, some surgeons have thought to unite simplicty and security by using cotton wadding sterilized by heat. But this wadding, being simply aseptic,only prevents infection as long as it is dry; once wet through to its external surface by secretions, it may become a septic mass, and there are always wounds where the secretion will remain abundant.

In some cases,a perfectly antiseptic dressing may be a matter of life and death. For in these cases with abundant secretions, only antiseptic chemicals can prevent the development of septic organisms. With this end in view, Lister employs a combination of the cyanides of zinc and mercury, which is a sufficiently strong antiseptic, and is moreover non-irritating.—*La France Med.*

Laache on Anæmia.

Iron has only one certain indication, and that is in true primary chlorosis. Unfortunately, relapses are frequent as soon as the treatment is stopped. And besides, the prolonged employment of iron is not advantageous either.

Arsenic gives good results in pernicious anæmia. Here also there are relapses. Besides, before judging the effect of a medicine it is necessary to remember that there may be spontaneous cures in these cases. It is necessary to be cautious in your progress, even in the most grave cases accompanied by loss of consciousness.

The manner of action of arsenic is as little explained as that of iron. It is known, however, that in those

cases (chlorosis) where iron is useful, the hæmoglobin is diminished absolutely (the globules being pale and less numerous); while in pernicious anæmia, the hæmo globin is diminished relatively (the globules are not more pale, but more dark than in the normal state). The iron appears therefore to act especially on the hæmoglobin.

In certain cases of chlorosis, purgatives are good. There is a special variety called feculent anæmia. There is in this probably a chronic intoxication by stagnation of fæces in the intestine.

Opinions are divided as to the utility of oxygen inhalations.

Transfusion is of service especially in pernicious or post-hæmorrhagic anæmia.

Bozzolo of Turin states that he has treated many cases of anæmia caused by anchylostoma duodenale. They present certain differences from the other anæmias. Among other things, they lack retinal hæmorrhages. In these cases febrifuges have given excellent results. Perroncito has employed extract of felix mas. Bozzolo has used thymol in doses of 8 to 12 grammes a day, divided into 3 doses. Most of the patients speedily get well after an abundant evacuation of the parasite.—*La France Med.*

Pseudo-Microbes of the Human Blood.

In normal blood, collected with antiseptic precautions, Kallmann, of Leipzig, has observed small bodies, some of which are small points, just within the limit of being visible, and others are of a diameter of about .05 μ, and are either round or elongated, or present a form analogous to cocci, diplococci, streptococci, bacilli, etc. They are endowed with very lively mobility. They evidently are derived from red blood corpuscles, probably also from certain leucocytes at the moment of their decomposition. Examination by means of staining fluids confirms that they are artificial products; cultures on gelatine have also been sterile.

It might be possible that the bacilli of malaria of Tommasi-Crudeli have the same signification, as so many others have already been recognized to be artificial products.

Gualdi states that some of the bodies described by Tommasi-Crudeli and Klebs are, in fact, known to be of artificial origin, but that there is no doubt of the existence of micro-organisms characteristic of malaria, which one never encounters except in the blood of malaria patients. It is impossible for an experienced observer to confound these two forms, between which there is a wide difference.—*La France Med.*

Van Tienhoven on Enuresis of Children.

Nocturnal incontinence of urine in children is caused:

1. By insufficiency of the sphincter of the bladder, which permits the urine to enter the prostatic portion of the urethra.

2. By reflex action of the circular fibers of the muscular coat of the bladder (the detrusor muscle).

Elevation of the pelvis which prevents the urine from leaving the bladder and irritating the prostatic urethra, is the best mode of treatment. The child endures this very well, and does not complain about it. The results are excellent.—*La France Med.*

Treatment of Chronic Bright's Disease.

Lepine of Lyons: The danger in Bright's disease comes from insufficiency of the renal secretion. This insufficient depuration of the blood by the kidneys leads to uræmia, which is the true danger. It is, therefore necessary to make the patient urinate freely, but on condition of not over-exerting the kidneys. It is also necessary to sustain and stimulate the forces of the patient.

The aliment should contain very little albuminoid matter in proportion to fats and hydrocarbons. For the waste from the latter substances is not eliminated by the kidneys. All the substances which in these waste products contain nitrogenous products should be partaken of as little as possible.

Meat should be ingested in very small quantities. Dark meats or high meats, being rich in albuminous waste products, should be strictly prohibited.

Milk, although rich in albuminoids, does not produce much waste material, for all its nitrogen is utilized. It is rich in fat. None of its principles appear to irritate the kidney. Moreover, it is diuretic. It, therefore, not only furnishes no material for the kidneys to eliminate, but by its diuretic power, it helps to eliminate toxic principles already existing in the organism.

In the meantime, most patients restricted to absolute milk diet become disgusted with it, refuse to submit to it, and later on finish by not being able to digest it any longer.

Moreover, there is an advantage in not limiting patients to milk alone; one should allow them vegetables, fresh and dried bread, farinaceous articles, all of which augment the proportion of hydrocarbons.

Again, individual predispositions must be considered in the choice of aliments. What benefits one might harm another. The products of bad digestion are rich in waste materials, which are liable to irritate the kidneys if they are eliminated completely, and which poison the organism if their elimination is insufficient.

The albuminuria ought to be measured day by day.

Eggs, especially the whites of eggs, increase albuminuria and ought to be excluded from the diet of those suffering from Bright's disease. The same is true of certain salt water fish.

Diuresis is produced by alkaline waters and ptisans But cardiac lesions, so frequent in Bright's disease, render necessary the use of cardiac remedies. In the first rank of the latter comes crystalyzed digitalin, in doses from one to two miligrammes. It is prudent not to use this medicine two days in succession, but to inter-

rupt it for several days, so that its elimination may be complete.

Caffeine is recommended in gramme doses, especially by way of injection. Salicylate of theobromine is less active, even in three gramme doses. Strophanthus and squills are to be rejected on account of their irritating action on the kidneys. In the case of arterio-sclerosis, iodide of potash gives good results.

Revulsives over the lumbar region are very useful, especially in the period of renal congestion. Repose in bed, well covered, is to be recommended, in preference to vapor baths, which might prove dangerous. Walking is not to be advised. It is rather harmful, though in a less degree than cold and moisture.

Senator, of Berlin: I recognize the inability of medicine to combat albuminuria. Iodide of potash, though evidently without effect in parenchymatous nephritis, is perhaps very useful in the interstitial form coincident with sclerosis of the arteries, hypertrophy of the heart, etc. Here, evidently, the nephritis is secondary, and iodide is able to cause the albuminuria to disappear, diminish the polyuria and secure a prolonged remission. Semmola, Leyden and others are of this opinion. Milk is a good remedy in appropriate cases, especially in parenchymatous nephritis, where there is little thirst. It is, however, to be avoided in sclerosis with polydipsia.—*La France Med.*

American Medical Diplomas Abroad.—Any American medical man who has studied or traveled in Europe knows that on that side of the Atlantic American medical men get all the respect that they deserve, and usually a degree of kindly consideration which makes up for such defect as, if sensitive, they might otherwise be painfully conscious of. He knows that American medical colleges are treated just as fairly, and that the reason why European governments do not recognize American medical diplomas as a passport to practice is because they are not far enough off to be ignorant of the laxness with which such diplomas are granted in many parts of this country. Their action is simply that which a number of our own States have felt called on to take against men educated in other states, in order to protect their own inhabitants against ignorant pretenders.

It is a great pity that such steps should be needful in our own land, and we may well feel mortified that they have to be adopted elsewhere; but this condition of affairs exists, and there is only one way to cure it. This is by mending our methods of education and bringing our standard up to a point which will secure universal respect.—*Med. and Surg. Rep.*

The Tri-State Medical Association meets at Chattanooga, Tenn., on October 14. The Louisville & Nashville railway will furnish the best accommodations to the meeting, and it is moreover the most direct route from this part of the country.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., Editor. W. C. MARDORF, M.D., Associate Editor.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, OCTOBER 4, 1890.

The Value of Tracheotomy in Diphtheria.

It is sometimes of value to contrast the opinions prevalent in different countries regarding the status of certain therapeutic or surgical measures; the conclusions reached by continental authors, notably the Germans and English, are usually the result of mature study and deliberation. In a paper by Dr. Szontagh (*Pest. M. Chir.—Deutsch. Med. Zeit.*), he speaks interestingly of the present standing of the operation of tracheotomy in cases of diphtheria. As regards the prognosis in this affection, he puts the percentage of recoveries with internal treatment at 5%, or at the highest 10%. The operated cases show a much better proportion of recoveries, 27%. He believes, therefore, that the operation is not only indicated, but should be performed in all cases of laryngeal diphtheria. With reference to the technique of the operation, inferior tracheotomy should be preferred, since local treatment and treatment of the bronchi can in this way be more easily carried out. As a rule chloroform should be administered, as it renders the operation more easy of performance, especially where the necessary assistants are not at hand; it may often be dispensed with, in cases where it is replaced by carbonic acid intoxication, that is to say, where from laryngeal stenosis the sensibilities of the patient have been benumbed to any extent.

The immediate results of the operation are brilliant, but often only temporary. The operation is always a severe one, and the more so the younger the child. Indeed it may be said that in children under three years of age the prognosis of the operation is not far from unfavorable. It is of importance to know how far the disease has progressed down the air-passages. The further downward the disease process has extended the less favorable the prognosis, yet it is not just to say

that operation is productive of lasting benefit only when the disease has not advanced below the larynx; this extension to the trachea and bronchi is present in the majority of cases of laryngeal diphtheria, and in such patients quantities of pseudo-membrane are coughed up after the incision has been made. The prognosis is more uncertain in cases where the lungs are implicated, still more so where tonsillar and pharyngeal diphtheria is present. The treatment subsequent to the operation is of very material importance in determining the issue of the case.

A comparison of the results of tracheotomy with those of intubation of the larynx reveals that the latter does not give a larger percentage of recoveries; its chief, and one might almost say, its only, advantage consists in the fact that the consent of the parents is more easily obtained.

Œdema Glottidis After the Use of Potassium Iodide.

In the *Therap. Monatsch.* (*Deutsch. Med. Zeit.*), Dr. A. Groenonu of Breslau, says that one dangerous effect of the administration of iodide of potash, the production of acute œdema of the glottis, is in general so little known that he feels impelled to report several cases of his own, together with others gathered from literature. He gives nine cases in all, two of which (reported by Fournier) proved fatal before tracheotomy could be performed. The chief features of this uncommon and unpleasant symptom are embraced in the following conclusions:

1. In rare cases extreme dyspnœa, dependent upon œdema of the glottis, follows the administration of iodide of potash, which may imperatively demand the performance of tracheotomy.

2. This symptom is not necessarily the result of long-continued use or excessive dosage; on the contrary, it most usually occurs after moderate doses, and during the first few hours or days of use.

3. Other symptoms of iodism are generally wanting, so that conjectures as to its cause must be limited to that of localized action of the potassium iodide upon the respiratory tract and its adnexa; it is not part of a general œdema.

4. The causes of these attacks are not to be found in impurities in the drug, for chemical investigations have set this point at rest.

5. Local or general diseases can not be proved to have been responsible for the symptom in any of the cases, although influence of previously existing pharyngeal or laryngeal catarrhs as predisposing factors cannot be excluded.

6. The real cause is rather to be sought in an individual idiosyncrasy for iodide of potash, a conclusion which Fournier and Bing have also reached. This is the more probable from the fact that severe manifestations often follow the most insignificant doses.

7. This idiosyncrasy is not necessarily permanent, for patients frequently take doses after a few days with perfect safety, the exhibition of which had previously caused the most grave symptoms. This is also easily explained, if we suppose that the cells of the affected mucous membrane react after the first œdema, by a pathological increase of secretion, and that this latter action so alters their sensitiveness that they are able to endure a fresh imhibition of the same chemical substance without signs of irritation.

A point of practical importance to be noted is that the dangerous symptom of œdema of the glottis appears immediately after beginning treatment, and that it need not be feared after one or two drachms of the drug have been taken and have been well borne. Careful observation of the patient during the first few days of treatment is therefore indicated.

Rapid Increase of Population, and Early Deaths.

One of the most important and pressing social questions of the day was the occasion of a lively little tilt in the Pædiatric Section of the recent International Congress at Berlin. Dr. Drysdale spoke of the too rapid increase of population as an important cause of early deaths, and referred to the means to be used in preventing this. He said that Darwin's law of the "survival of the fittest" played a large part in modern human society; the weaker are forced to the wall, and the strong survive. The weakest to-day are not the weak ones, physically speaking, but the poor, and it is they who are overcome in the struggle for existence. A proof of this is the largely increased death-rates shown by statistics of the poorer districts. Just as poverty is the cause of this increased mortality, so are large families the chief causes of poverty. An offset to this, however, is the fact that the number of the offspring may be limited at pleasure. No one was obliged to have more than three children. It was true that Germany was renowned for her wealth of children; of what avail were these, when their presence brought with it a lowering of the physical and moral conditions of life for the poorer classes? A husband who does not do homage to Malthus' system helps to reduce his own condition. The zeal of the speaker was such that he agreed with those who cried, "The man who has more than three children is a fool!" The expression of these rather extreme views was repeatedly interrupted by marked expressions of disapproval, and the prevailing sentiment was one of strong opposition.

In the discussion which followed, Czatary, of Buda-Pesth, referred to the principle that each human life meant so much added strength to the nation for work and for bearing of arms. This alone should be a sufficient answer to the speaker's statements. It was not by any means a proven fact that the poorest were necessarily the weakest, in the struggle for existence. The speaker knew of people among the very poorest who

had attained very great ages. It was not necessary to start out at birth with means, in order to be ensured a comfortable existence. The very poorest could by their efforts amass means, and thus, according to Drysdale's argument, prolong life. The solution of the problem could be found in other means than those suggested by the essayist, as evidenced by the most recent efforts of the German Emperor.

Albert, of Palmberg, brought forward statistics which went to show that, of all countries, Drysdale's own country affords the least basis for his conclusions, for the conditions of life for those without means were much easier than elsewhere.

Wachsmuth, of Berlin, inflamed by patriotism, shouted, "We Germans need many children, especially sturdy boys, because we need many soldiers!"

In conclusion, Drysdale said that his convictions were still unshaken. It might be, that children in plenty meant wealth for the estate, but certainly did not mean wealth for the family. His little philosophy had taught him that man was here to enjoy existence, and not to be butchered, as a soldier. In little Europe, at least, there was not even the prospect of a decent existence for all the children that were born. He firmly believed that, from a moral point of view, no man in Europe had "the right" to bring more than three children into the world.

Seegen's Theory of Diabetes.

Dr. I. Seegen, of Vienna, read at the late Congress at Berlin, an essay (*Boston Med. and Sur. Jour*, September 18, 1890) on diabetes, based on a study of many cases —a thousand of which he had seen during the past year.

He holds, in brief, with the premises now established, that

(a) In the healthy body sugar is produced by the liver from the albuminoids and fatty compounds.

(b) This sugar is appropriated by the cells of the whole body, and is used for heat production and for bodily activity.

(c) The starches and sugars (carbohydrates) ingested are, in health, converted by the liver so that there is not an excess of sugar in the blood, and naturally they do not give rise to the sugar in the urine.

But, the diabetic condition is brought about by the derangement of either one or the other of the above functions, viz.:

(a) The inability of the cells of the body in general to appropriate the sugar which is naturally manufactured by the liver from the albuminous and fatty compounds, and the consequent accumulation of sugar in the blood; and

(b) The inability of the liver to carry out the process of conversion of the sugars and starches ingested; as a result, throwing into the circulation an abnormal quantity of sugar, which becomes evident as glycosuria.

Of these two forms the first is considered to be by far the more serious, being derived from a diseased condition of the cells of the *whole body*, and it cannot be ameliorated so much by regulation of the diet; while in the diabetes of the other form, limitation of the carbohydrates lessens the sugar production and benefits the disease.

MEDICAL ITEMS.

An Opportunity.—A physician is wanted at Tipton, Mo. Information may be had by addressing Dr. O. J. Risser, of that place.

Through loss of the name of the journal from which it was taken, we were unable to give credit for the most excellent Table Exhibiting the Normal and Abnormal Qualities of Urine, presented in our last week's issue. We are under the impression that the *Medical Calendar* should have been named as its source.

Influenza is now prevalent in Iceland; the disease, which is of very severe type, appears to have been only recently introduced, and has spread with great rapidity. Former epidemics of influenza in Iceland were more fatal than cholera; in 1843, in a total population of 57,000, the deaths from influenza amounted to about 2,000, and in 1866 there were nearly 1,500 deaths from the same cause.

Aristol has been employed by Zwiecicki in about 20 gynæcological cases, and according to his experience it is as good as, if not better than, iodoform, without possessing the toxic properties, unpleasant smell, etc., of the latter. He employed the drug in the form of ointments (10%), pencils (containing 15 grains), or suppositories (containing from 7 to 15 grains) in cases of endometritis, erosions, hyperplasia of the cervix, parametritis, and eczema vulvæ.

Death From Nitrous Oxide.—The first death in Canada under nitrous oxide is reported from Montreal. A man, æt. 24 years, had nitrous oxide administered for tooth extraction. No sooner had the tooth been extracted than the patient gave a gasp and almost immediately expired. The purity of the nitrous oxide was tested shortly after the accident by the President of the Dental Association, Dr. Beers, who himself inhaled it from the same inhaler.

Saccharin in Tooth Powders.—Constantin Paul, in his experiments with saccharin, found that mixing it with alkalies destroyed its antiseptic powers. Equal parts of saccharin and bicarbonate of soda do not disturb the digestive functions, and fermentation in the stomach is not interrupted. If two parts of bicarbonate of soda are mixed with three of saccharin, the result will be found to possess powerful antiseptic properties where pus formation is going on, and to be a destroyer

of the microbes of the oral cavity. According to this, this combination would be of value in the preparation of tooth powders.

THE TREATMENT OF VARICOSE VEINS.—Molliere, in *Lyon. Med.*, recommends tannin solution in the treatment of varicose veins. The solution consists of iodine, 1 part, tannic acid, 9 parts, distilled water, 200 parts. The patient is made to walk about for a half hour, in order to dilate the veins, after which a moderately tight bandage is fastened about the limb just above the site of injection; by means of a hypodermic syringe a few drops of the solution are injected into the enlarged vein, and the puncture is sealed over with iodoform collodion. The bandage is allowed to remain, and rest in bed for two weeks is enjoined; a hard cord is formed which is gradually absorbed.

ANTISEPTIC DUELLING.—A duel was recently fought at a little village on the Belgian frontier in which everything was conducted under strict antiseptic precautions. The sword-blades were first placed in boiling water and then carefully washed in a 5% solution of carbolic acid. The surgeons were ready with a corrosive sublimate solution of 1 to 1,000 and a number of gauze pledgets which had been rendered aseptic by thorough baking. Unfortunately for the success of the experiment, the duel was of the ordinary French kind, and the only wound received was a slight cut on the hand, which healed promptly after the application of a small piece of aseptic court-plaster.

A TWO HUNDRED-THOUSAND-DOLLAR LIBEL SUIT.—Suit has been entered by William Radam, manufacturer of Radam's Microbe Killer, against the *Druggist's Circular*, of New York, for $200,000 damages, the largest amount, so far as heard from, that was ever asked for in a libel suit of this kind.

The pleadings show that the action is brought to recover damages claimed to have been done the business of the plaintiff by an article published in the *Druggist's Circular* for September, 1889. This article gave the result of an analysis of the Microbe Killer made by Dr. R. G. Eccles, a prominent chemist of Brooklyn, who stated that an identical preparation could be made by the following formula:

Oil of vitriol (impure), - -	ʒiv.
Muriatic acid (impure), - - -	ʒj.
Red wine, about - - -	℥j.
Well or spring water, - -	gallon, 1.

This mixture, it was alleged, could be made at a cost of less than five cents per gallon, for which Radam charged three dollars.

It was further alleged that while, when properly used, sulphuric acid, the principal constituent of the Microbe Killer, was a valuable medicine, it was, when taken without due caution or advice, a slow but certain cumulative poison; and the theories advanced by Radam, as to the causes of diseases and the proper method of treatment, were alleged to be totally erroneous. Col. Robert G. Ingersoll, the famous lecturer, is the counsel for the plaintiff.

The *Druggist's Circular*, which is published at 72 William Street, New York, expresses a desire to hear of any case in which unfavorable results have followed the administration of the Microbe Killer, or of any other fact that would be interesting under the circumstances. They claim to have published this analysis without malice, and with the sole intention of protecting the public from the loss of their health and money by the use of a dangerous nostrum.—*Boston Med. and Surg. Journal.*

ROTTERINE.—"Rotterine" is the awkward name given to a new antiseptic which has been devised by Dr. Rotter, and recommended for its non-toxic effect. It is composed as follows:

℞	Sodii chlorid, - - -	gr. ijss.
	Zinci chlorid.,	
	" sulpho-carb., - - -	aa gr.xlv.
	Acid boric, - - -	gr.xxvij.
	" salicyl., - - - -	gr.vj.
	" citric,	
	Thymol, - - - -	aa gr.j.

Mix. Dissolve in one pint of water.

The citric acid is added merely to get a clear solution of the chloride of zinc, and the thymol is intended simply to distinguish the mixture from ordinary water, which it resembles in appearance. The constituents are given in about one-tenth of the strength required to render them active singly. Combined in this way they form a mixture possessing astonishing antiseptic powers, the germicidal influence exerted being said to be greater than that of a solution of 1-1,000 of corrosive sublimate. In his first attempts, Dr. Rotter used with the above traces of corrosive sublimate and carbolic acid; but as he found the mixture quite as effective without them, he concluded they could be left out.—*Med. and Surg. Rep.*

LITERARY NOTES.

The seventh edition of "Da Costa's Medical Diagnosis" is now announced by J. B. Lippincott Company as ready. The work has undergone a thorough revision at the hands of its eminent author, and many chapters have been entirely rewritten, so as to inculcate all that has been added to our knowledge of disease up to the present time. A number of wood-cuts are included, especially of such micro-organisms as have proved to be of practical significance in diagnosis. All the illustrations are original, and many are from sketches, or based on sketches, taken directly from cases of interest. There is no work more helpful to a young practitioner than this one, which has already been pronounced by eminent critics "the best book on diagnosis extant."

Another valuable book just issued by J. B. Lippin-

cott Company, is Prof. Garretson's Treatise on the Diseases and Surgery of the Mouth, Jaws, Face, Teeth and Associate Parts. Upon the appearance of the first edition many years ago, it assumed the leading place as a text-book, to which its merits and the distinguished position of its author entitled it. Much important matter has been added to the new edition, together with numerous illustrations, which greatly increase its value to dentists, surgeons and physicians.

SOCIETY NEWS.

TRI-STATE MEDICAL ASSOCIATION—ALABAMA, GEORGIA AND TENNESSEE.

PARTIAL LIST OF PAPERS.

President's Address, "The Doctor."—J. B. Cowan, M.D., Tullahoma, Tenn.

Amputation of Hip in "Two Times Method."—Duncan Eve, M.D., Nashville, Tenn.

Report of a case of Ulceration after Exsection of the Breast.—L. G. Dozier, M.D., New England City, Ga.

Report of a case of Fracture of the Pelvis, with presentation of patient.—W. T. Blackford, M.D, Graysville, Ga.

Case of Remarkable Injury with Recovery, presentation of patient.—E. A. Cobleigh, M.D., Chattanooga, Tenn.

Report of a case of Gangrene of the Leg.—W. L. Stephens, M.D., Dayton, Tenn.

Report of a case of Phlegmonous Abscess.—C. H. Holland, M.D., Chattanooga, Tenn.

Report of a case of Cancrum Oris.—W. P. McDonald, M.D., Hill City, Tenn.

Report of cases of Fracture at the Elbow Joint.—Andrew Boyd, M.D., Scottsboro, Ala.

Neuralgia.—W. L. Gabagan, M.D., Chattanooga, Tenn.

Morbid Reflex Neuroses Amenable to Surgical Treatment.—Willis F. Westmoreland, M.D., Atlanta, Ga.

Abscess of the Liver.—Richard Douglass, M.D., Nashville, Tenn.

Report of a case of Abscess of the Liver.—J. R. Rathmell, M.D., Chattanooga, Tenn.

Cases of Gall Stones.—E. E. Kerr, M.D., Chattanooga, Tenn.

Expert Testimony.—Mr. Sydney B. Wright, Chattanooga, Tenn.

On all Sides a Learned Doctor.—James E. Reeves, M.D., Chattanooga, Tenn.

The Dynamics of Mediumism.—J. E. Purdon, M.D., Cullman, Ala.

A Contribution to the Study of the Continued Fevers of the South.—Llewellyn P. Barber, M.D., Tracy City, Tenn.

A few Remarks on the Fevers of Middle Tennessee and their Treatment.—J. C. Shepard, M.D., Winchester, Tenn.

Some Phases of Typhoid Fever as well as the Abandonment of the Typho-Malariæ.—J. W. Russey, M.D., Rising Fawn, Ga.

Paper by Chas. W. Tangeman, M.D., Cincinnati, Ohio.

Diagnosis of Corneal Affections—Flourescein.—Frank Trester Smith, M.D., Chattanooga, Tenn.

Eye Strain.—A. G. Singlair, M.D., Memphis, Tenn.

Physiological Functions of the Nose.—A. B. Thrasher, M.D., Cincinnati, Ohio.

Uterine Fibroma.—J. C. Murfree, M.D., Murfreesboro, Tenn.

Some Irregular Forms of Epilepsy, with report of cases.—W. C. Naples, M.D., Bellefonte, Ala.

Paper by F. W. McRae, M.D., Atlanta, Ga.

Dilated Cardiac Hypertrophy, with Nephritic Complications.—W. C. Townes, M,D., Chattanooga, Tenn.

Urethral Stricture and Its Complications.—J. D. Gibson, M.D., Birmingham, Ala.

Palliative Treatment of Fissure of the Anus and Stricture of the Rectum.—John P. Furniss, M.D., Selma, Ala.

Some Affections of the Rectum.—L. J. Krouse, M.D., Cincinnati, Ohio.

A fare of one and one third rate has been secured on all roads.

INSTRUCTIONS.—Procure straight tickets and procure from your ticket agent a certificate showing the purchase, form, and kind of ticket, rate, route, etc. Get the Secretary of the Association to endorse the certificate, present it to the agent, at Chattanooga for return ticket at one-third rate. On C., R. & C. R. R., buy a round trip ticket. From some points it may be advantageous to purchase the ticket to Lookout Mountain. North of the Ohio, Harvest Excursion Tickets will be on sale on Oct. 14, one fare for the round trip.

FRANK TRESTER SMITH, M.D.,
Secretary.

CLINICAL LECTURE.

CATARRHAL JAUNDICE.

BY JAMES B. WALKER, M.D.

This man came here three weeks ago. He was then vomiting a greenish fluid and his stools were light colored. He had had an inflammation of the stomach, and four days afterward jaundice appeared. He was given small doses of calomel, and in five days he was feeling quite well again. His temperature was normal; in twenty-four hours it went up to 101° F. and is now 100°. The yellow staining is still to be seen on the walls of the abdomen where it appears later than on the mucous surfaces. The conjunctivæ are found to be stained on the lining of the lids, though the scleral conjunctiva is clear. The tongue is also clean on its upper and under surfaces, but the inner surface of the lower lip still shows the staining.

Before he was brought here the patient had had the influenza, which left him in a weakened state generally and especially in his digestion. Improper diet as to quality, and perhaps also as to quantity, induced a dyspepsia resulting in a gastro-intestinal catarrh, associated with vomiting and followed by light-colored stools and general yellow staining of the visible surfaces, both mucous and tegumentary. This is catarrhal jaundice. It results from a catarrh, with consequent irritation and swelling of the mucous lining of the common bile duct and continues with the catarrh of the duodenum and stomach. The inflammation may extend not only to the smaller ducts of the liver, but even to the hepatic cells themselves. Jaundice from this form of obstruction varies greatly. Its depth is due to the completeness of the occlusion of the common duct. If incomplete, the jaundice may be slight, as in this case, or intense and long persistent where errors of diet protract the original cause. The jaundice from a biliary calculus, as a rule, lasts but a short time. The stone is either more or less rapidly carried into the duodenum, or, if too large to be driven through, it may ulcerate in any direction or it crumbles and is easily voided as biliary gravel. The jaundice following an ordinary attack of bilious colic, is due, not to the obstruction of the duct by a stone, whose transit is too short lived to induce much, if any, cholemia, but to the biliary catarrh, induced by the injury to the mucous coat of the bile duct by the sharp, hard edges of the calculus which persists long after the stone has escaped. The treatment, in this case, has been chiefly mercury and sodium phosphate; and he has had removed from his diet everything that is constipating, irritating or stimulating. His nutrition has been altogether liquid or semi-liquid. It should be milk, with or without lime water or seltzer water, in varying amounts, according to the patient's preference. I prefer the latter where gastric catarrh persists. Peptonized milk may also be used when the stomach is to have thorough rest. Something must also be given to lessen the concentration of the bile which is started in the hepatic lobules as one of the most fluent of fluids. This fluency is due in part, as you know, to its dilution, but much more to its property of wetting animal membranes on account of its peculiar salts, the glycocholate and taurocholate of sodium, to which it owes its virtues in influencing the absorption of the emulsified fats. But while starting as an extremely dilute fluid, arrangement is made for the resorption of much of it before it reaches the duodenum. The ducts and the gall cyst are abundantly supplied with capillary vessels and special retention cysts are found, into which the bile can enter and from which its liquid may be absorbed. In obstruction to the inflow, this is accentuated; and perhaps in this manner of direct absorption, along the ducts and in the cyst, as much as by the backward pressure into the capillaries of the lobules, the bile tinges the blood and all the tissues it comes in contact with as well as all the secretions. The main object of treatment is to lessen the tendency to inspissation of the bile, by rendering it more alkaline, and to prevent the precipitation of cholesterin, which is excreted by the liver, and which, when it becomes concentrated, crystalizes and forms gall-stones.

What shall we give to produce this result? There is an old maxim in therapeutics, to give ammonium for the lungs, potassium for the kidneys and sodium for the liver. Although this maxim is not of universal application it nevertheless serves as a basis for therapeusis. Sodium being the basis for the liver salts is especially appropriate in aiding in preservation of the alkalinity of the secretions. Some advocate the use of the bicarbonate and others of the phosphate of sodium. I prefer the latter for the reason that the phosphate can be taken more easily and for a longer period of time. It should be given in doses of from one-half to one teaspoonful in half a tumbler of hot water one-half an hour before meals; and this treatment should be kept up until the jaundice begins to lessen, after which it should be continued in teaspoonful doses in the same way before breakfast. Some prefer the use of sodium benzoate; but I like the phosphate better, because it is laxative and is less foreign to the alimentary tract. In the beginning of the attack, however, the phosphate should be preceded by a course of mercurials. The purpose of the latter is not to stimulate, but to unload the liver; and the question whether or not mercurials increase the formation of bile does not enter into the discussion. It should be given in small doses, repeated often—one-twelfth of a grain every hour and with a grain or two of soda and a grain of sugar of milk. As soon as the bowels are completely unloaded, stop the mercurials and begin the use of soda on the plan given above. Copious injections of cold water are recommended by some physicians for the rapid relief of jaundice, in the catarrhal form, but I have had no experience with the plan.—*Med. and Surg. Reporter.*

SELECTIONS.

STUDIES IN THERAPEUTICS.

CONDUCTED BY JOHN AULDE, M.D.,

Member of the American Medical Association, of the Medical Society of the State of Pennsylvania, etc.

[Abstracted from advance sheets of "Notes on New Remedies."]

Creasote. Guaiacol.

Introductory.—Within the past two years a great mass of literature has accumulated upon the uses of creasote and guaiacol, its most active constituent, the reports coming from a large number of practitioners in different parts of the world. An examination of the more recent text-books shows that heretofore creasote has not received due attention, the subject being considered along with carbolic acid; the general belief has been that the two products were for all practical purposes in-

terchangeable, but accumulated experience shows that creasote possesses distinct and valuable properties which do not belong to carbolic acid. Such being the case, I have deemed it worth while to give the subject some attention, mainly by way of a review of the experience of those who have been most active in their efforts to promote the employment of creasote in the treatment of pulmonary affections. At the same time, I have deemed it advisable to enter into a study of the materia medica of the two products, creasote and guaiacol, and have also investigated to some extent the pharmacology in the hope that this information would be well calculated to aid physicians in the intelligent use of these two products.

Creasote is a product of the distillation of wood-tar, a substance analogous to carbolic acid and possessing some properties which are similar. Its two active constituents are *guaiacol* and *cresol.*

Dose, 1 to 3 minims, preferably in capsule form with balsam of tolu, or it may be used by inhalation.

Guaiacol occurs in the form of a colorless, oily, strongly refractive liquid, having a peculiar, aromatic odor and neutral reaction.

Dose, one-half to one drop, three times daily, gradually increased. Bourget recommends the employment of alcoholic solutions in summer and its combination with cod-liver oil in winter.

Pharmacology.

The general action of this substance is that of an antiseptic, although creasote does not destroy the digestive power of ptyalin; a solution of 1 in 500 destroys yeast, and bacteria are killed in watery solutions in the proportion of 1 in 1,000 (Werneke), thus showing that it is serviceable in lessening the increase of micro-organisms in the alimentary tract without interfering with digestion. Its destructive action upon yeast indicates the employment of this remedy in the treatment of consumption, because this class, as a rule, suffer principally from yeast fermentation, owing to improper diet, too much starchy food being taken. Later experiments by Koch show that creasote in the dilution of 1 in 2,000 prevents the growth of tubercle-bacilli, and in dilutions of 1 in 4,000 this growth is seriously interfered with. Fermentation is undoubtedly prevented through its destructive action upon low forms of vegetable life; it arrests the movements of protoplasm without apparently producing any change in it, and when applied locally to healthy or diseased tissues, it is anodyne, probably through its influence over the sensory nerves.

From the use of moderately large doses, the activity of the circulation is temporarily increased, but in cases where the drug has been taken daily for a considerable time, this cardiac irritability passes off spontaneously. With the quickening of the pulse there is more or less headache and giddiness, and respiration is somewhat slowed and labored. The most pronounced effects of creasote are noticeable from laboratory experiments undertaken with a view to determine its action upon muscular structure; it is a very active muscle-poison, which enables us to account for its depressing action upon the heart when taken in large doses. Introduced into the stomach creasote causes, when the organ is empty, considerable irritation, with a sensation of heat and more or less nausea, but these are not symptoms of common occurrence when taken after food. Albumin as well as blood are coagulated by creasote, and as patients who take it for a long time improve in appetite and digestion, we are led to infer that digestion is favorably influenced by it.

Therapeutics.

Inasmuch as creasote has gained its prominent position through its supposed power to arrest the progress of pulmonary affections, it will be appropriate to study the reports which have appeared during the past two years. The observations of Bogdanovitch, of Yalna, are very interesting. Being a sufferer himself from pulmonary and laryngeal tuberculosis, he began taking half a grain four or five times daily, and gradually increasing the dose until he took 44 grains daily. Fever disappeared, expectoration and cough diminished, and there was less dyspnœa and laryngeal spasm, but the tubercle-bacilli remained unchanged. Dr. Bogdanovitch thinks five grains may be taken four times daily—after eating. Large doses—twenty grains in the course of an hour—caused giddiness, cardiac palpitation, small and accelerated pulse, general weakness, pallor and anxiety, but these effects disappeared spontaneously in the course of an hour. Small doses on an empty stomach caused pain and uneasiness, but this effect may have been partly due to the method of administration; the drug was taken pure, in the form of capsules, prepared extemporaneously.

Hofmann treats laryngeal ulcerations locally in addition to the internal exhibition of creasote, but he is of the opinion that where diarrhœa is a complication of consumption, the remedy fails to afford relief. He strongly advises its use in the case of blood-spitting with cheesy degeneration and shrinking of pulmonary tissue, as well as in the suspicious bronchitis of children, and in eczema with hardening of the glands. He advocates the use of the drops in lukewarm water instead of capsules, in order to obtain the local antiseptic action on the mucous membrane of the mouth, pharynx, larynx and œsophagus.

Beverly Robinson reports favorable results from the employment of creasote in phthisis (*Amer. Jour. Med. Sci.*, June, 1889), but his observations have been confined to the exhibition of comparatively small doses—about 2 minims three times a day, combined with whiskey or glycerin, or both. The cases treated by Robinson numbered over 150, and he included in his report in addition, 150 cases treated by Dr. Chas. H. Collins, House Physician at St. Luke's Hospital. These observers are inclined to regard the treatment with favor, more especially the method by inhalation, but suggest that in all cases, nutrition is the cardinal factor always to be kept in view.

Austin Flint, in concluding a paper upon the use of creasote (*N. Y. Med. Jour.*), makes a statement, of which the following is a summary: The records of ten cases reported show, that creasote by the stomach and by inhalation, in cases of solidification without cavities, effects prompt and decided improvement in all phthisical symptoms. In cases with cavities, less improvement is to be looked for, while with large cavities, treatment is but palliative.

William Perry Watson, Jersey City, reports fifty cases (*Virginia Medical Monthly*, 1889), and concludes that while creasote will not cure all cases of consumption, yet it will benefit nearly all; that in cases with simple consolidation, before the "breaking down" process begins, it seems to arrest the disease process. In acute and chronic diseases of the bronchi, it was very beneficial, the former being quickly cured, while the latter were improved sufficiently to enable patients to leave the hospital in a short time. For inhalation, he uses the following formula:

℞ Creasote,
Spts. chloroform,
Alcohol, - - - equal parts.

M. Sig. Five to twenty drops to be used in the inhaler every three hours.

For internal use:

℞ Creasote - - - - - - ♏xxiv.
Glycerin - - - - - - fl.ʒ j.
Whiskey - - - q.s.ad. fl. ℥ij.

M. Sig. Take half a teaspoonful every three hours.

The foregoing excerpts will serve to denote the class of cases in which creasote is indicated, and at the same time cover the various methods of administration which have been found useful, together with suggestions as to the special class of patients who are likely to receive most benefit from its exhibition; but it by no means includes the names and reports of a large number practitioners who have arrived at similar conclusions. Some of these reports may be briefly summarized as follows:

Mosler, of the Greifswald Klinik, reports 53 cases treated, 30 of whom were distinctly improved, the improvement being often in relation with the amount of the drug tolerated, although in none did the bacilli disappear.

Sommerbrodt gives statistics of 5,000 hospital patients treated (*Medical Press*, 1888) with creasote, and he estimates that at least fifteen grains should be constantly in the circulation. He insists that it is an antibacillary remedy of the first order, notwithstanding the experiments of Cornet, showing that the incorporation of creasote does not hinder the growth of the tubercle bacilli.

Soltmann, of Breslau, was the first to record the use of creasote for lung affections in children. He gives from two to seven drops daily, combined with ether and sweetened water.

Bouchardat's formula is as follows:

℞ Creasote - - - - - - gr. xx.
Alcohol - - - - - - fl. ℥ vj.
Cinnamon water - - - fl. ℥ iij.
Cinnamon syrup - - - - fl. ℥ vj.

M. Sig. Take one teaspoonful three times daily, after meals.

Seitz, of Heidelburg, uses the following in tuberculosis:

℞ Creasote, - - - - gr. xxxviij
Cod liver oil, - - - fl ℥ viss
Saccharin, - - - - gr. ij

M. Sig. Take 1 to 4 teaspoonfuls, once, twice or thrice daily. Children take smaller doses.

Knowing the value of balsams in all pulmonary affections, the following is suggested as a formula for capsules:

℞ Creasote, - - - - - - ♏ ij
Balsam of tolu, - - - ♏ viij

M Sig. The above is for one capsule, which can be taken after meals, and the number gradually increased.

Treatment by Inhalation.—Assuming that creasote possesses the antiseptic and antifermentive properties claimed for it, which have been demonstrated by clinical and laboratory observations, it is but a step to depart from the usual custom of administration, and inquire into the advantages promised by inhalation. About the time that oxygen gas was first used medicinally, it was found that the mercurial employed in its manufacture was carried to the patient and ptyalism produced. Cannabis indica is used in oriental countries as an inhalation, and with more decided effects than when taken internally. The rapidity with which certain substances produce effects when taken into the system through the pulmonary apparatus is something remarkable, and if it were possible to reach the diseased areas in phthisis by means of vapor charged with the drug, undoubtedly much more could be accomplished than through systemic medication. Vapor of eucalyptus has been tried with negative results; oxygen inhalations have accomplished much when the patients have been taught to breathe properly; the cabinet, with an artificial supply of air, is now on trial, and so are inhalations of sulphur-vapor. That good results should attend the inhalation of the vapor of pure beech-wood creasote, or guaiacol, its most valuable constituent, is but a natural deduction.

The greatest difficulty lies in our inability to secure the co operation of the patient, as, to be successful, the pulmonary air-vesicles must be properly distended, in order that the vapor may be thoroughly diffused throughout the entire structure. This would be practically impossible in many cases, owing to the retrograde changes that have taken place, but in these instances the treatment by inhalation might be supplemented by interstitial medication by means of the hypodermatic method. The medicament is thus deposited in the diseased area. Another difficulty which presents itself, deserves special attention, viz., the necessity for a pure

product. Should the drug prove as favorable upon extended use as we are warranted in assuming from the previous reports, sophistications would be immediately placed upon the market. To show that my anticipations are well founded I have but to refer my readers to the experience. of Daywalt (*Notes on New Remedies*, May, 1890).

An ingenious instrument for the inhalation of creasote and guaiacol has been invented by Dr. G. W. Daywalt, of San Francisco, (loc. cit.), and with a reliable preparation, with attention to the patient's respiratory efforts, the hypodermatic use of the drug in special cases, together with the proper regulation of diet and appropriate hygiene, I believe that much can be accomplished in the way of arresting phthisis in the early stages. Dr. Daywalt has met with flattering results from the use of creasote by inhalation, and the limited expense is not sufficient to debar many physicians from adopting the method in general practice.

Creasote has been used in the treatment of stomach affections, such as vomiting due to fermentation, ulceration, cancer, the vomiting of pregnancy, and in many cases of diarrhœa in children. It has also some reputation in the treatment of Bright's disease, and has been employed with excellent results in two cases of diabetes by Valentine. In the first case of diabetes the patient began with four drops, three times daily, and this was shortly increased to ten drops, three times daily, when the sugar disappeared and did not return when the patient began to eat starchy food. The second patient received six drops per diem and did equally well. (*Medical Record.*)

Topically creasote is used for various purposes. For the relief of toothache, a small pledget of cotton-wool is saturated with the drug and introduced into the cavity, when a dry pledget is covered over the medicated cotton, sufficient to fill the cavity, and the whole area of cotton covered with sandarac varnish. This method is especially convenient in the latter months of pregnancy, when extraction is contra-indicated.

For burns the following will be found efficient:

℞	Creasote, - - - -	1 part.
	Bone black - - - -	2 parts.
	Rectified spirit, - - -	3 parts.
	Spermaceti salve,- - -	24 parts.

M. Sig. A salve for burns.

Guaiacol.

Sahli, of Switzerland, was probably the first to use guaiacol in pulmonary affections, being led to adopt it from the good results which attended the use of creasote. His first experience was quite favorable, although in a number of cases of phthisis with high temperature, it failed owing to the gastric irritation set up by its ingestion. It has been used in phthisis by Fraentzel in the Charity Hospital, Berlin, in the place of creasote with very satisfactory results, and he estimates from his observations in four or five hundred cases, that about 4% will be cured by the drug. Horner has employed it for four years at the General Hospital at Zwickau, in the treatment of tuberculosis, and along with careful attention to diet and hygiene, he believes that cases not far advanced have been cured, and some of long standing have been improved, although occasionally no perceptible effect was noticeable.

The method introduced by Bourget is known as the "intensive treatment," and he claims that by uniting pure guaiacol with pure beech wood creasote, very considerable doses can be taken without causing gastric disturbance. The following is his formula for summer:

℞	Guaiacol, - - - - -	fl. ʒij.
	Tr. chincona, - - - -	fl. ʒvi.
	Malaga wine, - - -	fl.℥ xxxv.

M. Sig. Take one teaspoonful with meals, gradually increasing to two or three times the quantity.

For winter treatment the following is recommended:

℞	Guaiacol, - - - - -	♏ xl.
	Cod-liver oil, - - -	fl. ℥ viij.

M. Sig. Take a tablespoonful with meals.

Along with this treatment, a guaiacol inunction is advised, and the patient is required to wear constantly a nasal respirator containing a small quantity of guaiacol.

℞	Guaiacol, - - - -	fl.ʒv.
	Cod-liver oil, - - - -	fl.℥viij.

M. Sig. Use as an inunction; apply to the chest, back and armpits at bed-hour.

In case the stomach becomes deranged, guaiacol, prepared as an emulsion, can be given by enema:

℞	Guaiacol, - - - -	gr. xxx.
	Sweet almond oil, - - -	fl. ʒ vi.
	Gum acacia, - - - -	fl. ʒ ii½.
	Distilled water, - - - -	fl. O ij.

M. Sig. Make an emulsion, and give one-fourth part three times daily.

Guaiacol is eulogized by Nobili as the "true therapeutic agent in tuberculosis," as he believes that it augments the power of organic resistance against tuberculous infection, and has a destructive action upon the tubercle bacilli. In his cases the appetite improved, night-cough decreased, but the fever and night-sweats were not always reduced, although the subjective symptoms were decidedly improved. Arnold Schetelig (*Deutsche Med. Zeit.*, 1889), substantially confirms the statements of Nobili, and asserts that those most susceptible to the influence of the remedy, are what would be termed in this country "flabby people." He is of the opinion that the good results are due indirectly to the improvement in the condition of the blood, rather than to the contact of the remedy with the mucous membrane of the stomach and intestine, and probably for this reason he uses the drug hypodermically, giving a single daily dose of pure, unmixed guaiacol of from seven to fifteen grains, the drug being deposited in the nates. He says the effects are most striking in the case of acute exacerbations occurring in chronic consumptives.

1910 Arch Steet, Philadelphia.

WHAT IS THE BASIS UPON WHICH A PHYSICIAN EXPECTS COMPENSATION?

There are two answers to this question—the one held by physicians and surgeons generally, and the other by many among the laity. The first holds that the doctor's claims for compensation rest upon the fact that he has performed service to some person. These services include his personal qualifications, his education and his experience. All these he is supposed to so employ that his patient receives the greatest benefit he can bestow. In brief, the doctor cures his patient. His knowledge and skill directs, as to the nature and kind of medicine to be given, or the sort of operation to be performed. It may be that he gives the medicine himself and performs the operation. But he does not charge for either medicine or knife, but for the work, mental or physical, performed. The second party holds that it is the doctor's medicine that is paid for. Hence they object to paying the doctor unless he gives some medicine or other tangible evidence of presence. Many physicians say that they frequently prescribe innocent remedies when nothing is needed, in order that they may receive compensation for their work.

Another evidence of the drift of popular mind in this direction is seen in the millions of dollars that they yearly expend at drug stores, corner groceries, dry goods stores, etc. They buy and take this amount of medicine on their own responsibility, because they believe that medicine per se cures them. Of the doctors' brains they take little account, except as a last resort when their own dosing of proprietary medicine fails them. Another illustration of this occurred lately in New York. The wife of a wealthy citizen employed a physician several months. It does not appear that his services were not, during the period in which they were rendered, perfectly satisfactory. But his bill was refused payment. An appeal being had to the court, expert evidence was adduced showing that the bill was proper. But the claim was adduced that the doctor had been lying to his patient. It seems that she was a morphine eater. Her physician treated her by substituting water for the morphine given per hypodermic injection. It was claimed that his charges were based upon false pretenses. The legal issue was so doubtful that the case was compromised by the family paying the doctor about one-third of his bill. It is unfortunate that the matter had not been decided by the courts. But for our purpose it suffices to note that the medicine the doctor administered, not the doctor's knowledge and skill in restoring his patient to health, was the ground upon which he was deprived of his fees. It is claimed that he affirmed that it was morphine when it was water. Dealing with his patient under this misrepresentation he lost his usual fee.

If, on the other hand, it could be maintained that the doctor's fees were for the knowledge and skill applied in the interest of the patient, his fees would be sure though he did give water in place of the expected morphine, when the case called for this management. This is the position of good sense, and the position that should be taught the laity at every suitable opportunity. When once this has gained a lodgement among the people, the rank of the medical profession will be elevated far above its present position.—*Ed. Am. Lancet.*

FIXATION AND APPLICATION OF THE RETENTION CATHETER.

In the *Centralblatt fur Chirurgie* for April 19, 1890, Dr. Emil Pilz, of Vienna, describes a method of fixing a catheter for long periods in the male bladder. The method has for many years been used by Prof. Dittel and his pupils and is simple and safe. A fine pin and a strip of adhesive plaster about nine inches long and two inches wide are all that is required.

Having thoroughly syringed the urethra, a Nelaton catheter, previously sterilized in 1-1,000 corrosive sublimate solution, is lubricated with vaseline and introduced so far into the bladder that its fenestra is completely beyond the sphincter vesicæ. The proper place having been found, the needle is thrust transversely through the catheter close to the glans penis, and its sharp end is snipped off, care being taken that the penis is not elongated. The catheter is thus prevented from slipping further into the bladder. To guard against ulceration from pressure of the needle, a perforated strip of plaster is slipped over the catheter and placed upon the head of the glans penis below the needle. To prevent the catheter slipping out of the bladder the strip of plaster, with a longitudinal slit, is slipped over the catheter up to the needle. Both ends of the strip are fastened to the penis, the one upon the dorsum, the other upon the under surface, and additionally fixed by circular turns at the glans to avoid venous stagnation and œdema. The equal pressure exerted by the plaster prevents erection with unavoidable displacement of the fenestra of the neck of the bladder. Other positions of the penis have no influence upon the situation of the catheter; nor is lateral escape of the instrument possible. A slight modification is necessary when employing an English or metallic catheter, the protracted use of which, from the annoying pressure they occasion, should be restricted. The needle could also be used with the English catheter, but is passed with difficulty through the hard rubber of the instrument; and, on account of the orifices which remain, the catheter is rendered unsuitable for subsequent use. It is, therefore, better to wrap securely about the catheter, beyond the head of the penis, a small strip of plaster, over which is tied a ligature, the extremities of which are fastened to the penis by circular turns of another strip of plaster, and additionally tied to the pubic hair. In the case of the metallic instrument the thread is simply passed through the rings of the pavilion to the penis and there fastened.

Following are the indications for the use of the retention catheter:

1. To prevent the flow of urine over certain parts of the urethra and consequent infiltration, as in traumatisms of the urethral mucous membrane.

2. To exert moderate yet constant presssure, in those forms of urethral stricture, the dilation of which, either from their nature or on account of the high febrile reaction which always follows, produces little improvement or is extremely painful. In the latter cases, the elastic retention catheter (the English and metallic instruments are but poorly borne), aids greatly in the gradual dilatation of the cicatrices.

3. In a third group of cases, the catheter permits the evacuation of the urine, protecting the intact urethral mucous membrane, as after litholopaxy.—*Med. and Surg. Rep.*

THE TREATMENT OF SCARLATINAL ANASARCA.

The most important point is to guard against the attack altogether. For this reason a scarlatinous patient should be kept in bed until the end of the sixth week, and even then the prognosis is to be guarded, as there may be an insidious disease to be developed within a year. To put the matter in a nutshell, keep the child in bed, sufficiently covered, for at least six weeks, the temperature of the room beingl from 64° to 68° F., and let the diet be liquid and chiefly of milk. It is well to continue some form of iron all through this period, preferably the tincture of the chloride or Basham's mixture. Digestion is to be aided by pepsin if necessary, and the bowels must be kept open by glycerin suppositories, or simple enemata. During the stage of desquamation, daily anoint the entire surface, including the scalp, with an ointment of—

℞ Acid. carbol., - - - - gr. xx.
Thymol, - - - - - gr. x.
Vaseline vel ung. simp., - - ℥j. M.

Then put in a warm bath for five minutes, protecting from cold, and put to bed, wiping the body dry beneath the bed-clothes. This has the effect of hastening desquamation, and of disinfecting and preventing the dispersion of the scales, which are active vehicles of the contagion.

In the case before you we will make the diet light, consisting of milk, broths, and a limited quantity of bread. He must not be taken out of doors until the œdema and albuminuria have disappeared. Then in clear and dry weather he should have exercise in the open air, short of fatigue. A warm bath, of temperature between 95° and 100° F., is to be given twice a week, preferably just before going to bed. A fluid-drachm of Basham's mixture should be administered twice daily, and the bowels must be kept regular; for this purpose two drachms of milk of magnesia may be given in the morning as required.

In nephritis of acute type it is necessary to use more active means: confinement to bed, milk diet, poultices to the loins, and if suppression of urine has occurred, four dry cups over the renal region, with a saline purge, and some remedy to act on the skin. To accomplish the latter indication, steam baths and jaborandi combined with citrate of potash are most efficient, as in the following:

℞ Ex. jaborandi fluid, - - - - fʒss.
Liq. potass. citrat., - - q. s. ad fʒiij. M.

Sig.—Teaspoonful every four hours, at the age of six years.

Digitalis in appropriate doses may be added if the heart be weak or irregular. If convulsions occur, bromide of potassium and chloral must be used. For a child of six years, fifteen grains of bromide and two grains of chloral suspended in mucilage may be given by the rectum. Diuretics are recommended by some practitioners, but they have always seemed to me to add to the work of the already overburdened kidneys, and to do more harm than good.—Louis Starr, M.D., in *Archives of Pediatrics.*

PAVY ON THE TREATMENT OF DIABETES.

Dr. F. W. Pavy read an article on the subject at the recent meeting of the British Medical Association, which, while not advancing any novel theory, presents clearly and with the authority which the writer has been conceded to have on the subject, the reasons for, and the importance of, the dietetic treatment of the disease. After speaking of the function of the normal liver in intercepting sugar from entering the general circulation, he says:

"Sugar reaches the general circulation in a manner that it ought not, and to its presence in the system are due the various symptoms belonging to diabetes. Through reaching the general circulation it becomes eliminated by the kidney and is lost. The disease thus involves a sacrifice of material which ought, by rights, to be turned to account, but this is a point that has but little bearing on the production of the phenomena that are observed in connection with the disease. If it were only a question of waste of the carbohydrate principles of food, there would be no reason against their being taken and allowed to run off. Provided a sufficient amount of other alimentary principles were consumed to meet the requirements of life no particular harm need arise from the sacrifice of the material occurring. What, it may be said, in reality inflicts the harm, is the altered constitution of the blood, occasioned by the presence in it of the sugar which passes through the system to the urine. In proportion to the largeness of the amount of sugar thus traversing the system in the blood, so will be the extent of deviation from the natural state, and so in correspondence the impairment of health that will be found to exist.

"The class of cases to which these remarks apply is that in which the discharge of sugar is susceptible of control by treatment, and the class embraces the major-

ity of the cases in which the disease sets in after the middle period of life.

"As long as the passage of sugar through the system is prevented no harm takes place. In the course of all my experience in diabetes I have never known anything serious to arise as a part of the disease so long as the urine has been kept free from sugar. There is nothing, in fact, to form the source of trouble, seeing that there is not the abnormal presence of sugar in the circulation to occasion deviation from the healthy state. On the other hand, when sugar is passing through the system, and the remark applies in proportion to the amount passing through, not only are there to be observed the symptoms ordinarily consequent thereon, but a constant state of insecurity exists, from the danger of the supervention of the serious issues known to follow upon the disease. Moreover, with the unnatural state occasioned by the presence of sugar, nutritive action is not carried on in such a manner as to properly maintain the general strength. As a consequence, the general power becomes sapped or prematurely exhausted, and the system weakened and rendered less able to resist the effect of pernicious influences. Such is not the position when sugar is not similarly traversing the system. Indeed, there is nothing to render the state essentially different from that ordinarily existing.

"The contrast between the two conditions—that is, where sugar is allowed to abnormally exist in the system, and where it is prevented from doing so—is well shown in cases where the disease has run on for some time without being recognized, and is subsequently controlled by dietetic treatment. What will be observed in such instances will be a gradually advancing impairment of health and increasing severity of the symptoms of the disease, and it is right to assume that progress in the same direction would run on, and the pstient grow worse and worse, if the condition continued to be left to itself. Whilst matters are thus proceeding it happens, say, that the existence of the disease becomes recognized, and, if the case be such that the sugar is susceptible of being removed from the urine by the exclusion of the carbohydrate principles from the food, and this exclusion be carried out, this alone will suffice, not only to check the downward progress occurring, but to bring back health and strength to the patient.

"The first consideration, therefore, in the treatment is to control by dietetic measures the passage of sugar through the system. The real point, however, to be aimed at, is to restore the assimilative power over the carbohydrate elements of food, and until this has been accomplished it cannot be said that a cure has been effected, but only that the disease is held in subjection, and prevented, as long as the condition can be maintained, from leading on to an unfavorable issue. What most conduces to the desired restoration of assimilative power is the maintenance of a normal state of the system by keeping free from the passage of sugar through it, and in this way bringing a healthy condition of body to bear in helping to promote a removal of the faulty state.

"According to my own experience, opium and its derivatives, codeine and morphine, are the medicinal agents which, more than any others that I know of, assist in the actual cure of the disease, by which I mean a restoration of the assimilative power which has been impaired.

"The influence of these agents may be witnessed in cases where the sugar has been brought down by diet to a certain point, but is unsusceptible of entire removal from the system by dietetic treatment alone. The complete removal may then be sometimes observed to follow the subsequent administration of the drug, showing that the medicinal agent has acted in the direction of exerting a restraining influence over the abnormal production and elimination of sugar."—*Boston Med. and Surg. Jour.*

The Local Treatment of Diphtheria and Scarlet-Fever Throat.—I have lately had much experience with the treatment of these affections, and have found that hydrogen peroxide, fifteen volumes strength, alone or combined with bichloride of mercury, gr. j to ℥j gives me better satisfaction than any other remedy. Hydrogen peroxide is a thorough antiseptic, besides acting mechanically in getting rid of the membrane; it does the latter in the later or most dangerous stage, for it is at this time that septic infection is more liable to occur. When the membrane begins to slough, the peroxide will, when applied with a mop or in spray or as a gargle, get behind it, and, by its action on the pus, free oxygen and carbonic acid gas, thus displacing it; the membrane appears under its action to lose all its toughness and crumble. If used in the nose—and it is here where we get wonderful effect—the peroxide had better be made of about ten volumes strength, and if the bichloride is combined with it, make it only gr. ½ to ℥j, or in very young children still weaker. Before closing, I must add that but a small quantity of the medicine should be bought at a time, as it degenerates rapidly unless kept on ice in a dark place, and not agitated. The hydrogen peroxide losing strength so rapidly makes it very difficult to get pure, so any one who should be disappointed in its action should not give up the use of it until he has surely tried the pure article. It will not, of course, cure all cases. Another point in its favor is that when used in the throat it causes no pain. The action of the hydrogen peroxide, its thorough antisepsis, and the beautiful mechanical action in forcing pus from cavities, is well known. It should never be used in a cavity unless there is free vent, and especially when this cavity is about the neck; as such a volume of gas is liberated, such an accident as I came very near having is quite possible. An abscess of the parotid gland following scarlet fever had been opened by a small incision. I thought I would wash it out with a little hydrogen peroxide, which I proceeded to

do. As a result I had a tremendously distended sac, the child blue in the face, and nearly suffocated. A large free incision set matters right in a moment. As an application, and, when the patient is old enough, as a gargle, pure or half and half with listerine, it is the best application in scarlet fever and follicular amygdalitis I know of.—W. Cheatham, M.D., *N. Y. Med. Jour.*

Rupture of Vagina in First Coition.—The *Annals of Surgery*, May, 1890, publishes an account from a Russian journal, of a previously quite healthy, newly-married young Hebrew woman, æt. 23 years, of middling size and make, who applied to Dr. Sinaisky, of Slutzk, Russia, on account of pain on walking and defecation, which symptoms had appeared after her first marital intercourse two days previously. She added that the coition had given rise to an excruciating local pain and profuse bleeding, causing her to faint. The examination showed that the woman's external genitals were developed quite normally, and that the hymen (of a semi-lunar variety and a moderate thickness) was intact. On separation of the labia majora the posterior commissure proved to be lacerated, the wound forming a funnel-shaped cavity admitting freely two or three fingers and communicating with the rectum just above the anal sphincter; the vagina contained fæcal gases and matter. There was also present a total rupture of the perineum running along the raphe, but involving only the skin and subcutaneous cellular tissues. The husband was a man, æt. 23 years, possessing a large-sized member, but no knowledge concerning marital business; at least he stated that he had never yet had intercourse with women until the present occasion. Since the couple most emphatically declared that neither of them had introduced finger or any foreign body into the woman's genital tract, and since all their statements seemed to be altogether trustworthy, Dr. Sinaisky arrives at the conclusion that the lesions were inflicted solely by some violent and wrongly-directed pressure of the inexperienced young man's powerful and stffliy-erected penis against the base of the hymen, the woman, possibly lying in some inappropriate posure. The violence might be intensified by virtue of the attempt at coition being undertaken with retracted prepuce, the young man being a circumcised Hebrew.

Use of Eggs in Albuminuria.—Physicians, such as Senator and Semmola, have strictly forbidden the use of eggs to those troubled with Bright's disease, under the pretext that they cause albuminuria. On the other hand, Stokvis, Griswold and Oertel, and, more recently, Dr. Schreiber, of Berlin, assert that, in their researches, they have never found albuminuria of alimentary origin to occur that had been caused by the ingestion of either cooked or raw eggs. Among these and others, there are some who go so far as to recommend the use of eggs in Bright's disease. According to them, this aliment, aside from its mitigating the often deep disgust that an exclusively lactic regimen sometimes produces for a certain period, is easy to take, and has valuable tonic properties. It is difficult, nevertheless, to pronounce in one way or the other, since, after a prolonged use of eggs, cooked or in the shell, albuminuria occurs in certain subjects and does not manifest itself in others. Messrs. Lecorche and Talamon attribute its development in healthy men to a concomitant gastro-intestinal functional disturbance. In certain cases, a portion of the albumen of the non-peptonized eggs is absorbed in nature and causes a renal irritation. The variability of this phenomenon may depend upon individual tolerance, and no absolute rule can be formulated in this regard. These gentlemen and the French physicians, taking a large nnmber of clinical observations as a basis, agree in the following conclusions:

Eggs, cooked or raw, will be prescribed with advantage when the digestive functions are normal, when the renal lesion is progressing but slowly, and when the general assimilation is going on well. The contrary being the case, they will be proscribed from the regimen as harmful, especially when uræmia is threatened. —*Gaz. Med. de Liege.*

Chloroform the Remedy for the Albuminuria of Pregnancy.—Dr. A. W. Briggs, of Atlanta, contributes to the *South. Med. Rec.* a paper to show that puerperal eclampsia can be prevented without danger to the mother or child, by administering chloroform in doses suited to circumstances as to the time you may have for treatment, or as to the urgency of the symptoms.

If you have six or eight weeks begin with 12 drops, and gradually increase the dose up to 15 or 20. The nearer the term, the larger the dose should be, though it is generally better to begin with a small quantity and increase it, as may be necessary. These doses are taken before each regular meal time, or three times a day, and also at midnight. The drug is dropped into two tablespoonfuls of water, or more if desired, and the patient directed to hold the breath and swallow promptly, immediately, exhaling a portion of air from the lungs, so as to blow off the fumes of the medicine. In very urgent cases he has given much larger doses with safety. He remembers one case that was on the very border of eclampsia. She had about one week to go, and was suffering with pain over the crown of the head. She was having one shock after another as if from a powerful battery. Twenty-five drops of chloroform were administered, and 15 were given in a half hour afterward, and the dose was repeated every half hour until she became quiet and composed. The urine, which had been scanty, rapidly increased in quantity, and great relief was afforded. The chloroform was continued in 25 drop doses, four times daily, until she was confined, which ordeal she passed through without an unfavorable symp-

tom. He has treated a number of such cases within the last 15 or twenty years with entire success.

During the treatment the urine should be examined at least once a week, that we may know how to regulate the dose of chloroform. The treatment should be persevered in as long as there is albumen to be found in the urine. A good rule is to increase the chloroform if the albumen is increasing, and *vice versa*. Do not crowd the patient too freely, but use good judgment and you will be satisfied.

It will be found that the digestion will be improved under the use of the chloroform and the anasarca will be relieved.—*Practice.*

THE TREATMENT OF RETENTION OF MEMBRANES. (F. Eberhart, *Zeit. f. Geburts. u. Gynak.*, xvi., 2).—The causes of retention may be irregular or inefficient contractions of the uterus, inopportune procedures for the removal of the afterbirth, or pathological changes in the histological structure of the fetal membranes. Among the latter, pathological-anatomical alterations in the various sections of the decidua are probably the most active. Retention may lead to hæmorrhage, or it may cause decomposition. If larger or smaller placental pieces remain behind, bleeding occurs as a necessity; decomposition may occur, but not necessarily. If membranous portions remain behind, they do not of themselves produce hæmorrhage, not being in direct vascular connection. If the retention be at once followed by bleeding, the latter is due to the bad or inefficient uterine contractions which caused the retention. Many consider the retention of portions of the ovisac within the uterine cavity as innocuous. Kaltenbach, supported by Doderlein and Winter, bespeaks the absence of germs in the cavum uteri as a cause, and declares that the retained product only undergoes decomposition on the entrance of germs from without, or when a portion projects into the vagina; for this reason we need not remove the uterine portion, contenting ourselves with the cervical or vaginal segments. Care should be taken to keep the vagina thereafter as aseptic as possible. Kaltenbach has practised this method for over five years with invariable success. Eberhart favors a rigid prophylaxis. If the placenta be expressed only after the characteristic signs of completed separation are apparent (flattening of the uterus antero-posteriorly, elevation of the fundus with good contractions, further expulsion of the cord), retention will only be observed in pathological changes. The expectant plan is followed; that is, the placenta is expressed only if from one and a half to two hours have passed without it being spontaneously expelled.

If now retention has already taken place, the uterine portion is undisturbed; only that projecting into the vagina is removed by inserting two or three fingers; the uterus is never entered. Ergotin preparations are given to hasten the separation of membranes.—*Am. Jour. of Obstet.*

DIFFERENTIATION OF HUMAN FROM ANIMAL BLOOD-CORPUSCLE.—The present status of the subject may be summarized as follows:

In the use of the micrometric test no confidence can be placed in the result, unless the errors of the micrometer used, with reference to authentic standards are known. Instruments used in investigation should be described. Where the subject continues during a short period in substantially the same condition of good health, there appears in the hands of the same observer to be an average size of the fresh corpucles, provided at least 100 corpucles are measured. There are such great discrepancies between the averages obtained from the measurement of the fresh blood corpuscles of animals of the same species, and between measurements of the same objects by different observers, as to throw doubt upon published results. Several tables of measurements can be given to prove this statement. There is no advantage in using very high powers in such investigations. Drying of the blood corpuscles in a clot multiples the difficulty of identification. It has never been proved that dried corpuscles can be restored to their normal proportions. The mean size of the red corpuscles of very young animals is larger and their size varies between wider limits than in adults. Many diseases alter the size of red blood corpuscles. This is especially true of microcythæmia. Fasting diminishes the size and number of red blood corpuscles as also do many drugs. It is impossible in the present state of science to say of any given specimen fresh or dry more than that it is the blood of a mammal. Other conclusions are scientifically indefensible.—Dr. M. D. Ewell in *Med. Standard.*

THE SIOUX CITY CORN PALACE, we learn, is again in process of construction, and this time on a grander scale than ever. This time it will look like a bit of scenery from the banks of the Bosphorus, for the design is that of a great Turkish mosque, and from its slender minarets and towering dome one might almost expect to hear the voice of the muezzin calling all true believers to prayer. But it is dedicated to the prophet of agriculture, and not to the prophet of Islam; to Mondamin, not Mohammed.

It will be 264 by 264 feet in size, twice as large as last year's palace. Its style will be graceful and beautiful in the highest degree. Its decorations will exceed anything of its kind ever seen. It will be filled with exhibits from all over the country. It will have an auditorium seating 1,200 people.

When the visitor enters he will be struck with wonder. He will look across a clear space of nearly one hundred feet, and on the opposite side, dazzling with incandescent lights, he will see a waterfall pouring into a lake, peopled with fish. There will be fairy grottoes, each one having a special attraction. Away up in the top of the lofty dome will be an artificial sky studded with electric stars. Strains of sweet music will mingle with the sound of the falling waters, and around will be arranged the useful and beautiful treasures of a score of states.

One of Reed & Carnrick's extensive factories at Goshen, N. Y., was destroyed by fire September 10. This factory was devoted wholly to the production of their soluble Food and Lacto-Preparata and contained extensive and valuable machinery. They had considerable stock of these Foods at their New York office, and consequently there will be no delay in filling orders. The factory will be at once rebuilt three times the size of the one burned, with machinery correspondingly enlarged.—*Dietetic Gazette.*

Mississippi Valley Medical Association.—This meeting, to be held at Louisville, Ky., promises to be one of the most interesting gatherings the Association has ever yet had. A varied and interesting programme has been arranged for, and some of the best talkers in the Association will be present. This, together with the well known generous hospitality of the citizens of Louisville, is an assurance that all who attend this meeting will be amply repaid. As has been stated in these columns, the Louisville "Air Line" Railroad, (ticket office 103 N. Broadway) has granted this Association a half rate of $8.00 for the round trip. This road being 60 miles the shortest route between St. Louis and Louisville, and the only line running solid vestibule trains between these points is conceded by all to be the most desirable. In fact Dr. J. M. Mathews, President of the Association, has given his official endorsement of the "Air Line's" being the chosen route for St. Louis delegates. Should any of our readers desire information as to train service or sleeper accomodation, communicate with, or call on H. E. Morris, City Passenger Agent, "Air Line" 103 N. Broadway, St. Louis.

Treatment of Snake-Bites.—Prof. Kaufmann contributes to the *Revue Scientifique* a paper describing his recent researches and experiments regarding the bites of poisonous snakes. He advises that in the treatment of a bite the injured limb should be tightly bound above the bite, as quickly as possible, with a handkerchief or any other available constrictor, and that then a 1-to-2 solution of chromic acid should be injected deep into the wound, making several similar injections in the neighborhood of the wound. If these directions are carefully followed, the poison will be destroyed before being absorbed. If there is already much swelling of the wound, more injections should be made in various parts of the swelling, which should then be manipulated to bring the acid thoroughly in contact with the poison. The swelling should then be freely lanced and as much as possible of the fluid squeezed out. The skin should be washed with the chromic acid solution, followed by the application of compresses saturated with the solution. If the swelling returns, these procedures should be repeated.

This local treatment should be supplemented by the internal administration of alcoholic stimulants and aqua ammonia. Prof. Kaufmann, however, strongly condemns the use of large quantities of alcohol, which, he thinks, paralyze and depress the nervous system.—*Indian Med. Gaz.*, May, 1890.

USEFUL FORMULÆ.

Hydrastis Canadensis for Uterine Hæmorrhages.—Hydrastis has given good results in hæmorrhages from fibromata.

The various preparations which should be employed are the fluid extract in doses of 60 to 80 drops per day, in single doses of 20 drops; the alcoholic tincture (of 20%), and the decoction of the root (60%.) The taste of the remedy may be masked in the following manner:

℞ Extr. fluid hydr. can.,
Vini. malagæ,
Syrup. cinnamon., āā.

Sig.: A spoonful in coffee every two hours.

The other formulæ are:

℞ Tinct. hydrast. can., - - - 90.
Elixir of Garus, - - - - 160.

Sig.: One teaspoonful one to two times daily.

℞ Tinct. hydrast. can., - - - 4.
Elixir of Garus, - - - 20.
Syrup. simplicis, - - - 30.
Aquæ destil., - - - 120.

Sig.: Take the whole amount in two days, four times daily.

The forms recommended among the Germans are the same, with the addition of hydrastinum verum (the hydrochlorate) and berberinum-phosphoricum. It is also prescribed in pill form with the following formula:

℞ Extr. sicc. hydrast. can., - - 6.
Extr. sec. corn.,
Ferr. hydrogen redact., - - aa 3.

Sig.: F. pil. 120.—*Ibid.*

Pruritus Vulvæ et Ani.—In pruritus vulvæ et ani, the following formula may be mixed with warm water and applied locally:

℞ Sodii sulphitis, - - - - 30.
Acid. carbolic., - - - - 5.
Glycerini, - - - - 20.
Aq. destill., - - - - 500.

—*Ibid.*

Chlorotic Amenorrhœa.—

℞ Ferri oxid. dialyzat..
Aquæ cinnamon., aa.

Sig.: A spoonful to be taken two or three times daily.—*Jour. de Med. de Paris.*

Treatment of Vesical Catarrh by Iodoform.—Mosetig-Moorhof uses as an intra-vesical injection in the treatment of vesical catarrh the following:

℞ Iodoform, - - - - parts, 50.
Glycerin, - - - - " 40.
Aquæ, - - - - " 10.
Gumm. tragacanthæ. —M.

Sig.: Dissolve a teaspoonful in 50 g. (f℥jss) of water and inject; repeat the injection every three days. After three or four such injections a cure will generally follow.—*Buffalo Med. and Surg. Jour.*

ORIGINAL ARTICLES.

THE LESSON TAUGHT BY THE MALARIAL ORGANISM.

BY HANAU W. LOEB, M.D., ST. LOUIS.

Read before the Medical Society of the Missouri Valley, May 20, 1890.

About a year ago I read a paper before the St. Joseph Medical Society, describing the organism which is supposed to produce malarial fever—the first article, I believe, that had been written in the West upon this subject. So little has been said upon this same micro-organism, in this section of our country, that I deemed it expedient to present to this Society the more salient points of that paper.

If this matter is considered of importance in India, Algiers and Italy where so many lives are endangered by this disease, it must be of some interest to us who live where the veritable hot bed of its growth exists. It is on this account that I beg your consideration of what may seem a tiresome bore to some of you; to me it is a living, tenable truth.

A distinction, and a clear one too, must first be made between malarial fever and that nondescript disease termed malaria; for the multiplicity of symptoms which are grouped under the latter head forms no part of my subject. What the laity terms malaria—and not a few doctors as well—has no more relation to malaria proper than an elephant has to elephantiasis—merely a play upon the accidental significance of a word.

Because malaria means bad air, and because bad air in the good old days gone by was supposed to cause the backache, headache and a few gastric symptoms, people imagine they have malaria and doctors prescribe quinine without stint, reasoning with a sort of *reductio ad absurdum*, that quinine being good for malaria is good for everything that is called malaria.

It is not this sort of a disease that is to be discussed, but a more definite condition, chills and fever, ague or intermittent fever.

It has long been the fashion to consider malaria a germ disease; men have spoken about the poison floating all around us almost from time immemorial, so that it should not be a difficult matter to find supporters of the microbe theory. And yet is it not strange that this lesson should not be more popular than it is?

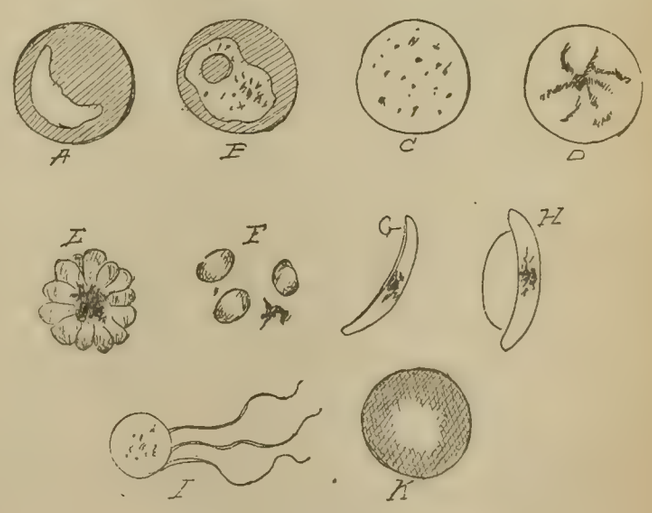
There are to my knowledge only three observers in this country who have, to any great extent, studied this subject, Prof. Osler and Dr. Councilman, of Baltimore, and Dr. James, of New York. I had the pleasure of studying the organism with the last named gentleman while I was his assistant at the Roosevelt Hospital.

The history of the germ-study of malarial fever is extremely recent. It seems that in 1879, Klebs and Tommasi-Crudelli discovered, in the mud of the Italian marshes, a bacterium which they termed the bacillus malariæ and which they claimed would produce in an animal into which it was injected an intermittent fever not unlike malarial. Shortly after this, Marchiafava claimed that he had discovered this bacillus in the blood of malarial subjects. Sternberg, in our own country, made experiments which did not confirm the deductions of the Roman pathologists; in fact they seemed to dispute them.

In 1881, Laveran published an article describing a pigment in the red blood-cells, which he thought was due to the action of an organism which he termed the plasmodium malariæ. It was not until 1886 that much attention was paid to the affair, when Celli and Marchiafava both admitted the truth and pertinence of Laveran's discoveries. Camillo Golgi in the same year confirmed these experiments and gave a detailed history of its action and effect. In 1888 Marchiafava read a paper before the Italian Society of Internal Medicine, adding to the burden of proof already given. He stated that the medium of invasion of these parasites is the lungs; from thence they pass into the pulmonary capillaries and into the general circulation, undergoing their various charges and transformations. The non-contagiousness of the disease is explained on the ground that the organisms live, multiply and die in the blood and therefore never leave the blood-vessels unless the blood is withdrawn from the body.

The mode of examining, microscopically, these organisms is very simple. A high power microscope is required, a one-twelfth oil immersion lens answering in a satisfactory manner. The technique is almost nil. A clean-cover-glass is taken; the finger is pricked with a pin; a small drop of blood placed on the cover-glass; this in turn is put on a slide and manipulated in such a manner that the rouleaux are broken up and the specimen is ready for examination.

The drawings which I have made will indicate to you in a measure the appearance of the red blood-cell and the organism.



[From Medical Record.]

The following may be observed:

A. In a red corpuscle, which is generally larger than

normal, is a colorless protoplasmic body varying in diameter and possessing a certain degree of amœboid movement.

B. Similar to the former, possessing the same amœboid movement, but containing, scattered about, small pigment particles.

C. Disc-shaped bodies, protoplasmic in their nature, containing pigment bodies, but possessing an amœboid movement.

D. Similar to the foregoing with the exception that the pigment is in the center and presents a sort of radiating appearance.

E. Small masses appear which seem to be the result of the segmentation of the corpuscle or cell.

F. The segments and pigment-grains separated.

G., *H*. The so-called crescentic bodies, containing pigment particles, but differing from the cyst form (*c*) in shape.

I. The flagellated body, containing pigment grains and provided with flagellæ which constantly move.

From a careful and continued observation, it has been determined that the first appearance of the organism is the unpigmented form (*A*); that this entering the red blood-cell causes a change in it, by which the hæmoglobine becomes destroyed and as a result of its decomposition, the pigmented portion of the hæmoglobine is deposited in the organism itself (*B*); that this organism, continuing to develop, fills up the whole corpuscle and loses its amœbid movement, forming the cyst stage (*C*); that the pigment spots collect toward the center and form into a radiating arrangement (*D*); that the further change is the segmentation of the cyst (*E*); and last of all comes the formation of spores by the separation of the segments (*F*.)

From the life history, action and appearance of this organism, it has been decided that it is not a plant and does not belong to the class bacteria; it is therefore not truly speaking a germ but an animal, the hæmatozoon or blood protozoon.

The proofs that the hæmatozoon malariæ is the cause of the disease may be summed up as follows:

1. It has only been found in true cases of intermittent fever. Remittent fever thus far has not been studied and it is included by the writer under the head of true malarial fever because it has not been disproved that the organism of remittent fever is the same as intermittent fever.

2. It possesses a definite relation to the paroxysm, so much so that one may often predict an attack by examining the blood. It has been discovered that, as a rule, the organism makes its appearance the day before the paroxysm, continues to develop and is in the segmenting stage just previous to the chill.

3. The organism disappears under a course of quinine.

4. It does not exist when the patient has recovered nor is it found in the normal blood nor in any other pathological condition.

5. When blood of a person, suffering from intermittent fever, is injected into the blood-vessels of a healthy person, a typical case of intermittent fever results and coincident with this, the same organism which examination has proved present in the first case, exists in the second.

This must be a good lesson to the thoughtful physician, indicating a definite progress towards medical perfection. It teaches the differentiation between malarial fever and the so-called malaria; it teaches a limitation to the indiscriminate prescribing of quinine; it teaches the positive diagnosis of one disease. What more will it teach? I ask you, members of the Missouri Valley Medical Society, for answer. You have now merely a cornice projecting. Let us burnish and brighten it and by patient endeavor enlarge it until the entire obscure framework becomes part and parcel of medical knowledge.

OVARIOTOMY FOR THE CURE OF INSANITY. ULTIMATE RESULT OF AN OPERATION REPORTED AT THE UNION COUNTY MEDICAL SOCIETY, INDIANAPOLIS, MAY 21, 1890.

BY O. G. PFAFF, M.D., INDIANAPOLIS, IND.

Clinical Lecturer on Diseases of Women in the Medical College of Indiana; Gynæcologist to the Indianapolis City Dispensary, etc.

The specimens which I present to-night are a double pyosalpinx which I removed from a patient five days ago; they have been nicely preserved, and you can still see some of the pus in both tubes and ovaries, which I have just slit open for inspection.

There is nothing remarkable about these diseased organs save the supposition that they have been the cause direct of very pronounced insanity of the patient from whom they were removed; I will, therefore, give a short history of the case to date, with the intention to complete it when sufficient time shall have elapsed to demonstrate whether or not the operation is to benefit the patient permanently. This patient, 33 years of age, has been married 12 years, is the mother of two children, and has had no miscarriages. The youngest child was born about four years ago, and when the woman's menstrual periods returned following this confinement, they were accompanied by much pain; this suffering became more intense with each successive period, and at the same time it began to manifest itself a day or two before, and to continue a day or two beyond the flow. On account of the suffering the patient became very nervous, and when the monthly disturbance was at its height she was almost frantic. As time rolled on, these periodical attacks became so violent, and the woman's actions so strange, that it was evident to all that she was at such times actually insane. This insanity finally took such a violent form that she even attempted to kill her husband and children, and it became necessary to place her in confinement; consequently, she was taken to the Marion County Asylum, where her condition progressed from bad to worse, her insane periods be-

came more and more prolonged, until, finally, there remained only five or six days intervening between the attacks when it could be fairly said that she was in her right mind.

The history pointed so clearly to pelvic disease that the attending physician, Dr. F. A. Morrison, requested me to take charge of the case; together we made a careful examination, and agreed to a diagnosis of double pyosalpinx. Her husband was told that an operation offered a fair chance of relief to her, also that it might prove fatal, and that at any rate she was doomed to a life of chronic insanity if the operation were rejected. After considering the matter, he gave his full consent, and, accordingly, I performed the operation May 16, assisted by Drs. Morrison, Jeffries and Reese, of this city. I removed both tubes and ovaries, and, as you see, their condition confirms the diagnosis; she has so far made an uneventful recovery, and I shall watch her subsequent history with much interest, and report it in due time.

September 27, 1890. The patient made a rapid recovery, leaving her bed at the end of ten days, and claimed to be entirely free from pain; she was mentally about as she had generally been at the most favorable part of her inter-menstrual period. This condition of things continued without interruption, and at the end of a month she was allowed to return home with her husband, and resumed her household duties and the care of her children.

Since this time, a period of four months, she has continued to discharge the ordinary duties of housewife, without any symptoms, so far as can be ascertained, of her former mental derangement; and I have just this week seen her family physician who assures me that his patient has been entirely cured by the operation, and that her mental faculties are as bright, apparently, as they ever were.

THE TREATMENT OF MASTITIS BY REST AND PRESSURE.

BY DR. W. F. MILROY, OMAHA, NEB.

Abstract of a Paper read before the Medical Society of the Missouri Valley.

The design of the paper was to bring to the attention of the society a plan of treatment set forth in a paper published five years ago in the *Medical Record*, and to emphasize its value as illustrated by further experience.

The importance of attention to the subject was referred to, owing to its frequency and the imperfections of older methods of treatment, together with the serious consequences which attend the disorder.

Anatomically, there are three varieties, of mastitis, viz., subcutaneous, glandular and sub-glandular. Of the glandular form, a sthenic and an asthenic type appears.

The plan of treatment in question has to do with the sthenic type of the glandular variety only. This was shown to be a very frequent form of the disease.

The method was described as follows:

A piece of strong muslin is used, fourteen to sixteen inches in width, and of a length sufficient to reach around the thorax of the patient and overlap a few inches. The patient lies upon her back, with the arms elevated to clasp the hands above the head, thus drawing the axillæ well upward. One end of the muslin is slipped through beneath the patient, and the two ends made to overlap exactly as in the application of an abdominal binder. A pad of cotton wadding is placed between the breasts to serve as counter-pressure. The breasts are then pressed upward and toward the sternum by an assistant, and the muslin is fastened by pins, which are placed along the middle line about three-fourths of an inch apart. As the pins are put in place, the bandage is drawn tense by about all the force one can comfortably exert through his arms.

When the bandage has been fastened, proceeding in this way from above downward, it will usually be found that its upper part is comparatively loose, and a few pins should be removed and reapplied. The bandage should be brought well up against the axillæ, and thus the upper part of the breast will be included within it. When it is in place, a small wad of cotton should be tucked in beneath the folds of the axilla above the bandage. This will relieve all feeling of irritation from the bandage in that location. A small hole should then be cut with a scissors over the nipple of the sound side, and the child allowed to nurse this breast. The one principle to be borne in mind in the application of this bandage is to make sure that every part of the breast is included in it, and that the pressure is even throughout. With reasonable care this is easily accomplished. In case the trouble occurs long enough after confinement, so that the patient is out of bed, a strap of muslin may be passed over each shoulder and pinned to the upper edge of the bandage, before and behind. This will overcome any tendency toward slipping down. If the patient is in bed this is wholly unnecessary. The bandage having been once applied need not be removed until the unpleasant symptoms are entirely gone, but may be tightened above and below, as the diminishing size of the breast will permit. After all tenderness is gone, having removed the bandage, the breast appears greatly reduced in size, the integument is relaxed in small wrinkles and folds, and no sign of inflammation is present. There is, however, a uniform induration over the entire organ, it being in a condition somewhat analogous to that of hepatized lung-tissue due to pleuritic effusion. From this it recovers in a few hours if the child be reapplied to the breast, and in a little longer time if the breast be allowed to remain inactive. I would emphasize the necessity for all parts of the breasts being subjected to pressure, for if this be not done, signs of inflammation will very soon appear in the part not compressed.

Incredible as it might seem to one who had given the

matter no attention, that such pressure as has been described can be endured by a patient with a breast engorged, indurated, red and exquisitely sensitive, it is, nevertheless true. The cause of pain is pressure from within, due to the engorgement. Counter pressure between the bandage and the chest wall overcomes the distention, and the pain immediately disappears, provided the pressure be evenly applied.

In the early part of any inflammation there is a dilatation of the capillaries and small arteries of the whole neighborhood, which in this case is added to a physiological congestion of the gland. Now, owing to the anatomical structure of the parts, it is possible to so apply pressure that simply by mechanical force the engorgement with blood and with milk is very greatly diminished in the gland and *pro rata* the inflammatory symptoms. This is found to be the case, clinically as well as theoretically.

A number of writers have advocated rest with support of the breast. The author insists upon firm pressure as differing in its essential nature from simple support, and giving far better results.

The treatment by rubbing out the breast was unfavorably compared with that by rest and pressure.

First, because it is difficult to secure its proper performance, while the bandage is applied by the physician and does not require special skill.

Secondly, because it wears out patient and nurse, while the bandage gives comfort and permits rest.

Thirdly, because it is untidy, while the bandage is clean.

Fourthly, because it sometimes fails while the bandage in suitable cases and properly applied always succeeds; and

Fifthly, because it is irrational and unscientific in that while lacteal engorgement is admittedly a potent cause of this trouble, it is promoted by the rubbing, but the use of the bandage is based upon scientific principles and aims directly at the root of the evil.

Other advantages, such as the opportunity for the healing of sore nipples and the suppression of the milk in case of death of the infants were alluded to, and a severe case cited by way of illustration.

REPORT ON PROGRESS.

OBSTETRICS.

BY E. MUELLER, M.D., ST. LOUIS.

On Puerperal Scarlatina.

Dr. Reuvers (*Ztschr. f. klin. Med. Schmidt's Jahrb*). believes, with Olshausen, that in the large majority of cases of so-called puerperal scarlatina we have to deal with genuine scarlet fever. He believes it to be analogous to wound scarlatina, as described by Hoffa. Some of the peculiarities of puerperal scarlatina are explained by the circumstance, that the poison takes a quite unusual route in entering the system. As a result we have a very moderate amount of pharyngitis, while there are often very material pathological changes about the genital organs. The uterus, as the organ primarily affected, may be the seat of the same severe necrotic processes which are observed in the pharynx in cases of ordinary scarlet fever. It is quite evident, of course, that these local pathological changes may form the starting point for a septic infection.

Reuvers, however, is of the opinion that the poison of scarlatina is not, in all instances, responsible for the scarlatiniform exanthems occurring during the puerperal period. He is confirmed in this belief by the history of the following three cases, all three of the women having passed through an attack of scarlet fever in childhood: In the first patient the disease did not begin until a week after delivery (which is quite unusual for puerperal scarlatina), and, with the exception of a typical scarlet fever eruption, it ran the course of an acute and very severe septic infection, with the formation of pus, furnishing staphylococci, in both knee-joints.

In the second case the disease began on the fourth day of confinement. A purulent cellulitis developed on the left side of the uterus, which took the usual course, with the single exception, that a scarlatiniform rash made its appearance.

In the third case a severe endometritis followed a difficult artificial delivery. This gave rise to the retention of offensive secretions whenever a rise of temperature occurred, while at the same time a scarlatiniform rash was observed. Both disappeared with the re-establishment of drainage, but made their appearance once more later on, when the discharge had again ceased.

The last case is specially pointed out by Reuvers as seeming to prove that the rash was directly dependent upon unhealthy puerperal discharges. This may be explained by the formation in these discharges of poisonous materials which, when taken up into the system, give rise to the eruption. Of course, in addition to this "intoxication" there may be septic infection, as occurred in the first case. In the other two cases the organism was capable of isolating the focus of infection in the genital organs, and in preventing the carriers of infection from entering the circulation.

The distinction between puerperal scarlet fever and the toxic scarlatiniform rash is quite important in regard to treatment. "In every case, where diseased conditions of the general tract of a rather serious character can be demonstrated, it will be better from a practical standpoint to regard the rash as of toxic origin, and consequently to take decisive steps against the danger of infection arising from this focus."

A Sternopagous Monster.

The sternopagi belong to the monomphalic class of double monsters; they are of rare occurrence, at least in this country. Two complete individuals are united in front, from the upper part of the sternum to the umbil-

icus with a cord common to both. Dr. J. C. Fraser, of East Weymouth, Mass., reports a case of this kind in the *Amer. Jour. of Obst.* There were four perfectly developed arms and hands, and four legs and feet. Both bodies were males, the monster weighed eight pounds, and was born dead. The method of delivery, which is the most important and practical point to consider in this case, was the following: After the escape of the amniotic fluid, amounting to about a gallon, a head, which subsequently proved to be the left one, presented at the inferior strait, occiput to the right; a plural pregnancy was diagnosed. The pains having been regular and strong for an hour without any perceptible advancement of the head, the forceps was applied, which brought the head to the perineum in a few seconds. Progress again being arrested, with the contraction firm and regular, a left arm was brought down, which had the effect of bringing the head clear of the vulva. On the right, and immediately above the symphysis, another head could be distinctly defined. Traction on the one at the vulva produced a decided movement of the other, proving the existence of a monster with at least two heads. Interference then ceased, attention being given to the direction of the movements of the intra-uterine head through the abdominal walls during uterine contractions. This head, the right one, was placed on its spinal column, the chin resting firmly on the pubic arch and to its right. During contractions a slight motion to the left was noticeable; in the intervals this movement was then assisted by both hands being applied to the head, and by persistent action in this way it finally dropped into the extremely roomy pelvis. At the same time the vulvar head, performing a rotary movement to the right, presented a face upward; delivery was completed by a few more pains, the shoulders and body offering no resistance.

Shoulder Presentation; Embryotomy.

Dr. C. B. Hardin reported this case to the Jackson County Medical Society (*Kansas City Med. Rec.*). The woman, a multipara, under the care of a midwife, had been in active labor for five hours, and was almost exhausted from frequent and hard expulsive efforts. On examination a hand and forearm with a pulseless loop of umbilical cord were found protruding from the vulva. The child was coiled upon itself, with the head and feet occupying the fundus of the uterus. The amniotic fluid had been complely expelled, leaving the tissues almost as dry as sole leather. Version having been found to be impossible under the circumstances, the arm was amputated at the shoulder by means of a scalpel; the presenting part which proved to be the back of the child, was punctured with the finger (!), and the abdominal as well as the thoracic viscera were removed. The breech now became dislodged from above the pubes, and presented in the parturient canal. The child was then delivered with the forceps applied to the presenting part. The mother made a good recovery.

Rupture of the Uterus; Spontaneous Cure.

Gueniot reported to the Acad. de Med. (*La France Med.*) the case of a woman who was brought to the Maternity Hospital with a ruptured uterus. The diagnosis was very clear; the round ligament and anterior border of the liver could be plainly felt by the midwife in charge, Madam Henry, who immediately performed version. The fœtus and placenta, which had both escaped into the peritoneal cavity, were extracted without any difficulty, evidently through the vagina. The after-treatment consisted in the frequent use of antiseptic vaginal irrigations, and applications of ice to the abdomen. The patient made a perfect recovery. Gueniot says that this proves that a scrupulous peritoneal toilet is not indispensable to insure a favorable issue, if the fœtus with its appendages, or the hands of the accoucheur, have not been previously infected.

Thevard, of Lavigny-sur-Bray reported a similar case some weeks previously.

Perforating Rupture of the Vagina During Labor.

This accident is of much less frequent occurrence than rupture of the uterus. Dr. Everke, of Bochum, reports a case in the *Berl. klin. Wochschr.* (*Med. Chir. Rdsch.*). The patient had had a number of confinements in quick succession, causing the pelvic tissues and especially the posterior vaginal wall to be rather lax and easily torn. Strong labor pains, which followed the escape of the amniotic fluid, had a tendency to force the fœtus into the pelvis, which was impossible on account of the transverse presentation of the fœtus. Rupture occurred an hour and a half later, resulting in the passage of the fœtus and placenta into the peritoneal cavity. The tear was situated immediately behind the uterus, and extended laterally to the anterior vaginal wall, thus severing the uterus from the vagina posteriorly and laterally as far as the vesico-uterine pouch. On account of the supervening severe hæmorrhage, the laceration was immediately sewed up, but as the stitches tore out, 16 button sutures were inserted, when the bleeding ceased. The vagina was tamponned with iodoform gauze, ice was applied to the abdomen, and small doses of opium administered. The thighs were tied together, and the urine drawn with a catheter. The gauze was removed after two days, and the patient gradually recovered and regained her strength. The sutures were discharged spontaneously. The pelvic tissues were subsequently found to be in a normal condition.

Immediate Repair of the Perineum.

In a paper read before the New York Academy of Medicine (*N. Y. Med. Jour.*) Dr. T. H. Hance advocated the immediate repair of injuries to the pelvic floor, where the laceration had not extended through into the rectum, that is in cases where there was either

a clean cut through the perineum, or through the skin and perineum to one side or other of the median line. In those cases where the posterior vaginal wall had been ruptured without laceration of the skin, the operation also offered good results. He thinks that there ought to be no difficulty in recognizing these incomplete lacerations at or just before delivery (by digital examination) thus gaining time to make preparations to repair them at once. He introduces the first suture high up in the vagina above the tear, in order to avoid the formation of pockets; he also thinks that this method offers the best results for the restoration of the pelvic floor. If the laceration has extended up on both sides, they are to be repaired separately. The patient's legs are kept tied together for 24 hours after the operation, and the bowels are moved on the third day. He says that two points ought to be closely observed in order to insure success, that is the careful adaptation of the lips of the wound, numbering the sutures to individual requirements; and secondly, the observance of strict antiseptic precautions, including the use of antiseptic douches before and after the operation, antiseptic pad, etc.

All members taking part in the discussion expressed themselves as in favor of the immediate operation.

Combined Normal and Ectopic Pregnancy.

Dr. H. A. Harriman reported to the N. H. Medical Society (*Boston Med. and Surg. Jour.*) the case of a patient, æt. 32 years, and pregnant for first time. Abdomen unusually large; just above the pubes "a firm rounded eminence" presented itself. Small parts were felt in the right lumbar region, and also above the umbilicus; the parietes were stretched to an "enormous thinness." The case was supposed to be one of ordinary twin pregnancy. After the birth of a 7 pound living child, followed by the placenta, all pain ceased, although another child, apparently full grown, was in the abdomen. Strong labor pains set in again about 12 or 15 hours later, when, after these had continued for 6 or 7 hours without effect, extra-uterine pregnancy was diagnosed, occiput anteriorly, above pubes. No signs of life could be detected. It required very large doses of opium to quell the very powerful pains, which recurred with equal frequency and force for 8 nights, abating during the day-time. Very little pain existed at the end of 12 days. The tumor gradually diminished in volume, and 8 months later was about the size of a large cocoa-nut. The patient remained well.

The course of gestation, as far as could be learned, had been normal, with the exception of considerable abdominal pain about the fourth month. The last 8 weeks of pregnancy were also painful, and difficulty of locomotion was experienced.

A Substitute for Post-Mortem Cæsarian Section.

At the Pennsylvania Hospital, Dr. Sharpless, acting on the advice of Prof. B. C. Hirst, in order to obviate the necessity of making a post-mortem Cæsarian section, performed podalic version, followed by immediate extraction, before the death of the mother had occurred. The woman evidently had but a short time to live, she was pulseless, the eyes were open, insensible and glazed, and the death-rattle was sounding in the throat. The child seemed to be still in good condition; it was extracted in less that five minutes, although there was not the slightest dilatation of the os at the beginning of the operation, the tissues of the dying woman offering, as was correctly surmised, no resistance to the necessary manipulations. The child was born alive and cried lustily. The woman's death, a short time after delivery, was not treated by the operation, in fact, she seemed a trifle better after it. The autopsy showed meningitis to be the cause of death.

Prof. Hirst, who reported the case (*Med. News*), (*Bost. Med. and Surg. Jour.*) believes that, where the procedure is at all possible, it should always be preferred the post mortem Cæsarian section to various good reasons.

TRANSLATIONS.

PROCEEDINGS OF THE TENTH INTERNATIONAL MEDICAL CONGRESS.

TRANSLATED BY DR. F. NEUHOFF, ST. LOUIS.

[CONTINUED.]

Asepsis Substituted for Antisepsis.

Bergmann, of Berlin.—For two years I have used asepsis in my clinic. It is, however, practicable only in the absence of suppurations, phlegmons, gangrene and lymphangitis.

The aseptic method is based on the well established fact that infection of a wound through the medium of the air is very rare. The contact of the open wound with the atmospheric dust and its pathogenic germs is so short that generally no deleterious action has time to develop. Besides, it is possible to protect the wound by covering it with compresses as far as the operative manœuvers will permit.

Finally, in order that the operation room should contain the least possible germs, the walls should be smooth and easily cleansed. The floor should be constantly moist, so that infectious germs which fall from suppurating wounds can not be spread into the air.

A complete system of rigorous measures is necessary in order to avoid infection of wounds by direct contact.

First of all, the field of operation and the neighboring regions should be lathered and carefully shaved. Then these parts should be washed with sterilized water and soft soap. After this they are rubbed dry with a sterilized towel. The friction should be energetic, for it is the best means of removing the superficial lay-

ers of epithelium, together with the dust and microbes which adhere to it. Finally, the skin must be washed with 80% alcohol, and then with a 1:2,000 sublimate solution.

The hands of the operator and assistants should be cleaned by the aid of brushes, always submerged in a 1:2,000 bichloride solution.

Immediately preceding the operation, the patient is placed on a dry, sterilized sheet and is covered with a similar sheet, only the field of operation remaining uncovered.

All the instruments are boiled in a 1% soda solution, where they remain until they are needed. As required they are taken out, dried with sterilized gauze and handed to the operator. If they are soiled during the operation, all that is necessary to clean and sterilize them is to plunge them anew for a few seconds into the soda solution, which is kept ready in a boiling state. In this manner the instruments are always kept clean, aseptic, sharp and free from rust.

During the operation care is taken to check all hæmorrhage. For wiping the wound I employ no sponges, but instead I use a dry sterilized piece of tarlatan. All severed vessels are ligated with catgut. No wound ought ever to be sewed before it is completely dry and no longer allows a drop of blood to escape.

The threads of catgut are wrapped in one layer around thin plates of glass, and are disinfected in a 5% alcoholic sublimate solution, which is renewed until it remains perfectly clear. Just before the operation, the catgut is removed from this strong solution and is plunged in a 1% alcoholic solution.

The silk for sutures is not subjected to antiseptics, but is sterilized in the same manner as the material for the dressing and the linen, in a vapor sterilizer. Here the objects remain a half hour at the temperature of 100°C. After this they are placed in sacks of cloth and placed again in the sterilizer. A nurse, whose hands have been disinfected, takes the objects out of the sack, and carries them between two sterilized cloths into the operating room.

After amputation of the breast for cancer, with axillary involvement, I often introduce a drain in the direction of the arm-pit. Still, in this operation, as in others, drainage is not always necessary, and it is often sufficient to leave, between the sutures, an opening for the escape of secretions. It is also possible, in order to keep open a part of the wound, to sew, with catgut, a portion of the skin to the subjacent soft parts.

The wound is finally covered with gauze or with simple sterilized wadding, without the addition of any antiseptics. The first dressing is left in place during eight or ten days, or even during three weeks when the bone has been operated on.

Excellent have been the results from this aseptic method. It is not applicable, however:

1. When tubercular parts are operated on.
2. When suppuration, phlegmon, or gangrene exist.
3. When you operate on the buccal cavity, the rectum or the urethra.

In all cases where infection can easily occur, I leave the wound open at first, and stuff it with iodoform gauze, which I remove in two days. At the end of this time the wound may usually be sewed. To facilitate the escape of liquids, a part of the wound may be kept open, as above described.

Treatment of Biliary Calculus.

Hurley, of London, employs the following method to assist nature in expelling biliary calculi of small dimensions. He places the patient on his back, and then exercises through the abdominal walls sufficient pressure on the fundus of the distended gall-bladder.

The author presented specimens of calculi, of which one measured more than one centimeter in diameter, and which he had expressed into the duodenum, and from ten to forty hours afterward found in the stools. As soon as the calculus is dislodged, the size of the distended gall-bladder will diminish considerably, and an abundance of bile will also appear in the stools. The icterus will disappear in a few days.

Hurley takes care not to use this method of expression in cases in which he supposes that the calculi are finding a way out of the biliary bladder or ducts, by ulceration.

Excision of the Cerebral Cortex in Treatment of Psychoses.

In an old melancholic afflicted with excitable dementia, Burckhardt did not hesitate to trephine four times, and to excise portions of the cerebral cortex. Each operation was followed by an amelioration, and on the whole the dementia retroceded. In two other cases, one acute dementia (melancholic stupor), the other irritable dementia, trephining, followed by resection of portion of the cortical layers, also produced good results. The chief indication for this method of treatment is the existence of hallucinations of hearing. In the case of one who was afflicted for 40 years the author excised a portion of the left temporal convolutions. The operation was followed by transient delirium.

In another patient with hallucinations, the sensorial troubles disappeared in part, after an operation on the first temporal convolution. A second operation became necessary. This was followed by temporary aphasia.

In still another patient having hallucinations, an operation cured the hallucinations, but a little later there appeared general convulsions which terminated in death. The autopsy showed meningeal hæmorrhage.

The author thinks that the grave prognosis of the mental affection of these patients justifies his hardy attempts at a cure.

Treatment of Locomotor Ataxia.

Brower, of Chicago, admits three forms of ataxia, ac-

cording to the predominance of symptoms.

First, a cerebral form, characterized especially by cephalic phenomena, inequality of the pupils, trouble in the reaction of the pupils, myosis, temporary diplopia, optic atrophy, deafness, laryngeal signs, vertigo, and apoplectiform phenomena.

Second, a spinal form.

Third, a peripheric form, produced especially by traumatisms.

The treatment ought to correspond to these different forms. In all, however, prolonged repose in bed (during six to eight months) is a useful adjuvant; massage and change of climate are also indicated.

Suspension appears to the author to be useful in the cerebral forms. By acting on the vessels of the neck, this method modifies the nutrition of the brain.

Stretching of nerves is suitable especially in the peripheric forms. Brower uses, for stretching the spinal marrow, a special apparatus which produces at the same time stretching of the marrow and of the nerves.

In the spinal forms, he advises general faradization of the skin with the brush.

Finally, it is necessary to treat at the same time the diathesis; whether syphilitic, rheumatic or gouty, which is usually associated with tabes.

Diabetes Mellitus.

Dujardin-Beaumetz, of Paris.—Diabetes is only a symptom which is produced by an alteration of diverse organs, of which the liver, pancreas and brain are the principal ones.

The prognosis is indicated by the success obtained by the application of strict antidiabetic diet. The amount of sugar contained in the urine is of much less importance. Thus a patient may eliminate 600 grammes of sugar, and only suffer from a relatively light form of diabetes. The light forms are recognized by the fact that after 15 days of dietary treatment the sugar disappears from the urine. These cases can usually be spared all the complications and sequelæ of diabetes. If, on the other hand, the glycosuria persists undiminished in spite of change of regimen, a grave form of disease exists, which will rapidly progress, and the progress of which we will be powerless to impede.

There is a third variety of diabetes, in which the quantity of sugar in the urine will be somewhat diminished, but will not completely disappear. In this variety there frequently occur later on cerebral symptoms.

A complete cure, if it exists, is very rare. There is always a predisposition to relapse, when the patient relaxes his regimen. In some patients, finally, sugar reappears in the urine, although the regimen has been continued without change. In these cases there are usually psychical causes, fatigues, emotions, etc.

As to treatment, diet is the most important point. Amylaceous foods must be excluded. Fats are indispensable. The denial of bread involves difficulties. Gluten bread is usually so much adulterated that it contains as much starch as ordinary bread. Recently it has been attempted to replace it by "bread of Soyah," which is made from the seed of glycina hispida of Japan. This contains scarcely any starch, but it contains an essential purgative oil,unfortunately of a disagreeable taste. Fromentine and legumine also contain an illy tasting oil. Gluten maccaroni is adulterated as often as the bread.

Potatoes contain, proportionally, less starch than bread, and may, therefore, be allowed in small quantities. As to bread, it is better to advise, preferably, the eating of the crust; although it produces more sugar than the other part, much less of it will be eaten.

Fruits should be forbidden. Milk augments the sugar, and especially the qnantity of urine.

Alcohol is borne in large quantities by diabetics, because it is rapidly eliminated. It is, therefore, not surprising that this class of patients comprise many drinkers. Therefore strong wines and liquors should be interdicted. Wine mixed with water should be permitted. Beer and malt extracts are harmful. Tea, coffee and kola, on the contrary, are good stimulants and build up the system.

Saccharine has replaced glycerine, which was irritating, and easily produced the symptoms of "glycerinism."

Moderate exercise and hydrotherapy are advantageous, except in special cases.

The action of alkaline waters consists, probably, mainly in their effects on the general condition by excitation of the functions of the cells. The use of carbonate of lithia and of arsenic has a good effect, especially in gouty patients. I prescribe:

Carbonate of lithia, 0.30 (gr. iij).
Fowler's solution, gtt. ij (gtt. ij).

This amount to be taken in a glass of Vichy water before each meal.

But the greatest progress has been realized by the introduction of sedative antipyretics; antipyrine, especially in the dose of 2 to 4 grammes (30 to 60 grains) a day, may effect a diminution to one-half in the amount of sugar, and also especially in the polyuria.

At the end of some months, to prevent feebleness, I permit the eating of small amounts of bread, potatoes and fruits, as long as the sugar does not exceed 10 grammes a day.—*La France Medical.*

[TO BE CONTINUED.]

Alcohol and Tea.—Dr. Kræpolin, as the result of experiments upon the psychical effects of alcohol and tea, finds that the former substance in moderate doses hastens volitional acts, but does not hasten deliberative and associative processes. The purely reasoning processes, in fact, are lessened by alcohol. Tea, on the other hand, does not hasten volitional acts but does accelerate purely intellectual processes of association and reasoning.—*Med. Record.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, OCTOBER 11, 1890.

NEW USES OF GUTTAPERCHA.

The many properties which are peculiar to rubber and are to be found in no other substance, have rendered it a valuable adjunct in surgery; in the *International Journal of Surgery*, Dr.P.H. Bryce, of Toronto, adds a few more to the many uses to which it may be applied. The rubber web or dam so much employed by the dentists is the form to which he particularly refers.

One case in which he used it was that of a young man with extensive hæmorrhage into the scrotum, subcutaneous, the result of a trauma. This was treated at first with dry cold, applied, by the way, by means of quarter inch flexible lead tubing instead of the rubber appliances, which latter often prove to be clumsy appliances for the work for which they are designed; in order to promote absorption and reduce the infiltration, rubber web was cut to a convenient size to envelop the scrotum and after being applied, the ends were twisted and tied together at the top until an equable pressure was attained over all parts of the scrotum. This proved as effective as any application of the kind could have been. This means might also be used advantageously in cases where strapping of the testicle would be indicated. The one great advantage here would be its ease of application. The delicacy and elasticity of the rubber web would prevent an injurious degree of pressure on any one part.

In a case where a poor patient could ill afford the successive sizes of silk stockings necessary for the treatment of varicose veins with ulcerations, the woman was directed to take strong stockinette cut to the shape of the leg, and sew into it insertions of the rubber the whole length of the leg; a piece of the stocking was left as a tongue into which to sew button holes, so that by lacing, even pressure might be given throughout. The stocking can be taken off or adjusted at any time; the ulcers were relieved from direct pressure by a little padding around them.

It is often difficult to successfully apply ordinary bandages in cases of mammitis or mammary abscess. Here rubber dam serves an admirable purpose. A slit from a quarter to a half inch long for the nipple is cut in a strip about six inches wide; the ends were doubled and sewed to the bands of Canton flannel. The rubber is then stretched so as to exert the most pressure from the nipple to the periphery of the mamma, passed upwards under the axilla on either side, the ends of flannel fastened together behind with tapes or safety-pins, as preferred.

Dr. Bryce points out another use of this material, its application to maintain a moist dressing. Where it is applied directly to the skin, heat and moisture, in fact the effects of a warm poultice with the addition of pressure, are obtained. One objection to be found to its employment in this way is the troublesome eczema which it has produced in some of the cases in which we have seen it so used.

A SUBSTITUTE FOR TRANSFUSION.

In a paper published by Professor Sahli of Berne (*Corr. Brit. Med. Jour*). he calls attention to a simple, rapid, and safe method of introducing large quantities of water into the system. In five to fifteen minutes as much as a liter of fluid may be injected; the fluid used is a sterilized, bloodwarm salt solution of the strength of 73%, and it is injected by means of an Erlenmeyer's flask furnished with an elastic tube and a hollow needle the size of a knitting needle.

The site for injection is the anterior abdominal wall; to avoid any local reaction antiseptic precautions should be employed.

The skin is previously washed with soap and corrosive sublimate, and the puncture is afterwards sealed with aseptic cotton wool and collodion. Where the patient is restless, general anæsthesia may be used; the procedure in itself causes but little pain, especially where the skin of the abdomen is at all loose or flabby.

In the following conclusions the author sums up his views concerning the operation; the effects of the injections are supposed to be as follows:

1. Under certain conditions they thoroughly wash out the patient's system by inducing profuse diuresis accompanied by a strikingly increased elimination of solid constituents of the urine. 2. They dilute the body juices and poisonous substances present therein. 3. They furnish the necessary water supply to dehydrated tissues. 4. They aid the filling up of blood vessels, and thus raise an unduly lowered arterial tension.

The injection is indicated: 1. In cases of uræmia complicating the course of either acute or chronic nephritis, where the injection of a liter of the solution once or

twice daily is, as a rule, rapidly followed by a striking abatement of all symptoms. The best results, however, are frequently obtained when the injections are combined with the internal administration of digitalis. 2. In the "typhoid" state, where frequently even after the very first injection delirium ceases, the pulse becomes stronger and fuller, the tongue moister, etc. 3. In Asiatic cholera, cholera nostras, infantile diarrhœa. 4. In poisoning by any toxic substances, but especially by those which are liable to be eliminated from the organisms through the kidneys. 5. In cases where an internal use of water should be avoided (in order to secure physiological rest of the gastro-intestinal tract—for instance, in cases of perforation of the bowel, peritonitis, ileus, etc. 6. In cases of acute anæmia from hæmorrhage. The method is contraindicated (1) in cases of incipient or expected pulmonary œdema; and (2) in the presence of severe dropsy.

The Turkish Bath in Rheumatism.

Rheumatism, more especially the chronic form, is one of the great stumbling-blocks of the profession. The results of any and all treatment in some cases are so often unsatisfactory that physicians will no doubt be glad to hear of a remedy giving excellent results; the treatment is an old one, but its virtues are, unfortunately, not well known. Dr. Chas. H. Shepard, of Brooklyn, discusses the subject in an excellent paper read before the American Medical Association and published in the *Times and Register*. Treatment by the Turkish bath is certainly a most luxurious method of getting well. It is a sweating process, and the temperature may be safely raised to 200° F., and over in cases of emergency. A short stay in the hot room brings comfort to the rheumatic patient, so much so that he soon imagines his disease has left him. The bath does not seem to be weakening or debilitating to the patient, but appears rather to bring great relief to the bodily condition. In this respect it differs from the perspiration brought about by exercise. Other proofs are not wanting to show that the baths are not weakening in their effects; the shampooers, who work in the heat several hours a day, are examples of vigorous health. Invalids, so weak that they were not even able to sit up all day, have taken the bath once or twice daily for months at a time, constantly gaining in health, strength and weight. In many trades the workmen labor in a temperature much higher than 100° F.

Several theories may be advanced to explain the action of the Turkish bath, but leaving theory aside the fact remains that thousands of patients have entirely recovered under this treatment. The additional treatment necessary consists in strict hygienic and dietary regulations.

The cold bath often has a tonic effect, but the most relief is afforded by the sweating bath, followed by the cold showers. By a little ingenuity an arrangement may be improvised at the patient's home which will answer the same purpose as the Turkish bath; wet compresses sometimes give great comfort. The better plan would be to give the bath in its entirety, at a place where the proper conveniences are at hand, and for this purpose it would be better in some cases to remove the patient to an institution of the kind. Shepard's cases extend over thirty years, and the results are summed up as follows:

Of over 3,000 cases of this disease under treatment, at least 95% have been either entirely relieved or greatly helped. Some who were treated over 20 years ago have stated that they have not had a twinge of rheumatism since. Under this treatment swollen joints have resumed their normal size, acute pains have been eradicated, and the patient restored to general good health. Men are to-day actively engaged in business who were brought to us by their physicians, who acknowledged that ordinary medication had failed to reach their case. The records of every establishment using this remedy will bear out the statement that remarkably few have persevered in its use without experiencing permanent relief.

Dilatation of the Sphincter in Hæmorrhoids.

Dilatation of the sphincter ani in cases of hæmorrhoids has been known for some time, but not as a distinct and permanently curative method, save in exceptional cases. This treatment for all kinds of hæmorrhoids was first advocated by Verneuil, and afterwards by other French surgeons, who attributed the most remarkable results to this simple procedure. Carter B Higgins, M.D., of Peru, Ind., in the *N. Y. Med. Jour.*, warmly advocates this little operation in hæmorrhoids of all kinds, and states that he has had most remarkable success with it. His attention was first attracted to this treatment by observing the complete and permanent disappearance of a number of large internal piles in a patient who also had an anal fissure, dilatation for the relief of which also cured his hæmorrhoids. For eight years he had used no other method of treatment, and during that time he has succeeded in curing many most aggravated cases. He knows of no contra-indication to this treatment, and has applied it at all stages of labor, and in patients with advanced cirrhotic liver, enlarged prostate, urethral stricture, etc. He believes his results are equal to those of Verneuil, who reports 98% of permanent recoveries. He describes his manner of dilating as follows:

Hook the thumb of your left hand and the middle finger of your right hand so as to include both sphincters on opposite sides of the anus, and gradually but forcibly separate your hands until all resistance ceases, the object being to paralyze the muscles completely. It is commonly advised to oppose the thumbs, but in a great many cases the resistance will be found so strong that it will be impossible to separate the thumbs a suffi-

cient distance. I have in some cases found the sphincters for long contraction developed to such a degree as to give the impression of pulling on an iron ring. I have never known any bad results follow the procedure. No after-treatment is necessary, except in cases where there is complaint of smarting, which may be relieved promptly by the application of a pledget of cotton saturated with a 4% solution of cocaine. It is always advisable to perform dilatation under the influence of an anæsthetic, the A. C. E. mixture being the one I always use.

It would have been well if Dr. Higgins had given some more definite statistics of his cases, as to number, kind, the length of time they were under observation, after treatment, etc., for the statements he makes are somewhat startling. Allingham, in his work on rectal surgery, makes some mention of dilatation in hæmorrhoids, but says it should be used only in selected cases, not being adapted to all varieties. This seems to be the only text-book which gives it any other than a passing mention.

MEDICAL ITEMS.

Dr. S. S. Davis, of Barkersville, Mo., called on us *en route* to New York and Europe, where he intends devoting some time to medical studies.

Late Pregnancy.—A writer in the *Medical World* reports the case of a woman, seventy-one years old, who gave birth to a healthy and well-developed boy.

An Oleoresin from Pumpkin Seeds.—An oleoesin is now prepared from pumpkin seeds which is said to possess all the tænicide properties of the latter. It is not pleasant to the taste. The dose is half an ounce.—*Pharm. Era.*

We had the pleasure of a call from Dr. Daniel Morton, editor of the St. Joseph *Medical Herald.* Dr. Morton was on his way to Louisville, where he intended taking in the Mississippi Valley Association meeting—and all its material, as well.

Hot Water in Epistaxis.—Dr. Jonathan Hutchinson recommends for the treatment of epistaxis the plunging of the feet and hands of the patient in water as hot as can be borne. He declares that the most rebellious cases have never resisted this mode of treatment.

The Starch Poultice.—In *La Medecine moderne,* (*N. Y. Med. Jour.*) M. Brocq remarks that the starch poultice is almost always badly made. He then gives the following directions for making it: The starch should be blended thoroughly with precisely the right quantity of tepid water to form a paste. Boiling water is poured on to the paste, and the mixture is left on the fire for about a minute, being stirred briskly so as to make it quite homogeneous. Is is then spread on tarlatan that has previously had the stiffening soaked out of it.

Prevention of Conception.—The *Medical Press,* July 30, 1890, complains that in England the announcement of a marriage or a birth is followed by confidential letters offering, in exchange for the sum of one guinea, information bearing on the means of preventing any addition to the family circle. What next?

The Heart's Beat After Death.—Grey had an opportunity to observe a man who was guillotined, within one minute after the knife had fallen. The heart beat for six minutes, the contractions of the auricles and ventricles being independent of each other. This is the first time in the history of science that such an observation has been made on a human body.

Medical Achievement in China.—It is said of Dr. Kerr, a medical missionary at Canton, that he has, in the past thirty-six years, treated over 520,000 patients, and has prepared twenty-seven medical and surgical books. He has trained one hundred medical assistants, chiefly Chinese. China now possesses one hundred and four hospitals and dispensaries, at which, in 1889, more than 348,000 patients received treatment.

Wedding Bells for the Profession.—It is with pleasure that we chronicle the marriage of our talented and prosperous young confreres, Dr. Casey Witherspoon, formerly of this city, now of Butte, Montana, to Miss Nina Butler, daughter of Mr. Wallace Butler of this city, the ceremony having occurred on October 2nd.

The young couple have most attractive prospects for their future; that they may be realized to the fullest extent, is our hearty wish.

Medical Fees in Italy.—There is no official tariff of medical fees in Italy, but in every province there is a kind of court of appeal to which disputes on this subject between doctors and patients can be referred. The provincial sanitary councils are constituted referees in such cases, and after full consideration of all the circumstances, they decide the amount that is in equity payable. On the basis of this decision, the doctor can then invoke the aid of the law to recover his fees.

Electricity at the Exposition.—Waite & Bartlett, represented by Mr. Henry E. Waite, President of the Company, has an elegant display of electrical apparatus for medical use—probably one of the finest ever exhibited in the city—in the basement of the Exposition. He will be pleased to see any of our conferes, and show them the beauties of his line of goods.

We learn that Messrs. Aloe & Co. have obtained the exclusive agency for this firm, so that these goods will not leave the city at the conclusion of the Exposition.

An Auotomatic Gynæcological Assistant.—Upon witnessing the application in clinical practice of the Walsh Speculum Holder for maintaining the Sim's speculum in position, we are convinced that a great step has been taken towards the more universal use of this invaluable instrument, by enabling the general practitioner to dispense with the necessity of an assistant for that purpose.

Our next issue will contain a cut of the holder, illustrating its use and the ease with which it is applied.

Damages for Syphilitic Infection.—A wet nurse at Marseilles,who contracted syphilis from her nursling, recently brought an action against the child's father, and was awarded damages to the extent of 1,500 francs, or £60, says the *Br. Med. Jour.* The sentence was confirmed on appeal, and it having come out at the trial that the nurse had continued to suckle the child in spite of the danger which she ran in so doing, it is now proposed, by certain philanthropists, to confer a decoration of some kind on her, in recognition of this somewhat novel kind of heroism. The story strikes us as decidedly *fin de siecle.*

Failure of the Salol Treatment of Cholera.—Surgeon J. H. Tull Walsh, (*Indian Med. Gaz.*) attracted by the favorible report of Dr. Nicholson as to the good results of the treatment of cholera by salol, has tried it in a succession of 14 cases treated in the Puri Cholera Hospital; there were, however, 11 deaths out of 14 cases —giving a death-rate of 78.5%. A miscellaneous treatment with stimulents and astringents gave better results. He considers that Hueppe and Lowenthal, who first recommended this drug, have only succeded in adding one more to the number of medicines that will not cure cholera.—*Br. Med. Jour.*

Epidemics of Trachoma.—A serious epidemic of trachoma has recently occurred in certain lunatic asylums in Austria. In the asylum at Ybbs there were, at the end of July, 125 pronounced and 78 doubtful cases, while in the Vienna Landes-Irrenanstalt there were about the same time 22 cases, of which 7 were recent. The Minister of the Interior has accordingly sent instructions to the directors of all sick asylums in Lower Austria that every patient must be carefully examined for trachoma before admission. The Hungarian Minister of the Interior has, in view of the prevalence of trachoma in the southern districts of Hungary, ordered that special instructions in the recognition and treatment of the disease shall be given to all medical men in the public service.

An Anencephalic Fœtus Born Alive.—In the *Siglo Medico* of August 17, Dr. V. M. Bernal relates that on August 6 a full term male child was born at Navalengua which presented the following peculiarities: The whole of the frontal and both parietal bones and half of the occipital bone were wanting, together with the brain and the optic nerve ; the cerebellum was represented by a fungous tissue floating in a large quantity of liquid, black-looking blood, the whole being covered with a very thin pellicle. The face was dark-purple in color, and the ears were wanting. The eyeballs, nose and mouth, as well as the rest of the body, were perfectly developed. When Dr. Bernal saw the child six hours after its birth it was still alive, but it died two hours afterwards, having thus lived eight hours without a trace of cerebral structure. The mother is a healthy well-nourished woman of 23; this was her third pregnancy, the two previous ones having resulted in premature births at the sixth month.—*Br. Med. Jour.*

BOOK REVIEWS.

Medical Diagnosis with Special Reference to Practical Medicine. A Guide to the Knowledge and Discrimination of Diseases. By J. M. DaCosta, M.D., LL.D., Professor of Practice of Medicine and of Clinical Medicine, Jefferson Medical College, Philadelphia; Physician to the Pennsylvania Hospital; Consulting Physician to the Children's Hospital, etc. 1890. Seventh Edition, Revised. Philadelphia: J. B. Lippincott Company.

This classic of English medical literature—for it has really arrived at that state of distinction—has now reached its seventh edition; and we learn that a second edition of the German translation of it has appeared in Berlin, that a Russian translation has been issued, and that a French translation is now being made. Stronger testimonials than this could hardly be imagined. And it is not without a considerable degree of patriotic pride that we contemplate these facts; for do they not form a just and abundant recognition of the sterling worth of at least this exponent of American medical literature?

The present edition of this work covers the whole field of medical and physical diagnosis as it is understood at the present day—and, too, the element of conciseness having been employed to such advantage that the volume is not too bulky or unwieldy for practical use. It is *the* work for the young practitioner: without a correct diagnosis there can hardly be appropriate treatment; with a correct diagnosis, the treatment of a disease is readily attained.

Though the present edition has been revised and new matter has been incorporated, the size has not been materially increased thereby because of the rearrangement and condensation that some of the chapters have undergone. A number of woodcuts have been introduced, illustrating such micro-organisms as have been proved to be of practical significance in diagnosis.

A Text-Book of Practical Therapeutics, with Especial Reference to the Application of Remedial Measures to Disease and Their Employment upon a Rational Basis. By Hobart Amory Hare, M.D.,

Clinical Professor of the Diseases of Children and Demonstrator of Therapeutics, University of Pennsylvania; Physician to St. Agnes' Hospital and to the Medical Dispensary of the Children's Hospital; Laureate of the Royal Academy of Medicine in Belgium, of the Medical Society of London, etc.; Secretary of the Convention for the Revision of the Pharmacopœia, of 1890. Octavo of 632 pages. Cloth, $3.75; Leather, $4.75. Philadelphia: Lea Brothers & Co. 1890.

Our readers will no doubt recall the flattering notes that have appeared from time to time in the REVIEW, regarding the repeated successes of Dr. Hare, both in this country and abroad, in the way of capturing prizes for papers from his able pen, written by him, alone, and in association with other gentlemen. They will now have an opportunity of judging for themselves, both as to his literary capabilities and the merit of his teachings, in this, his most extensive production so far.

The author's large experience in experimental, didactic and clinical work has well fitted him to produce a volume containing all that is latest and best in the application of remedial measures, and to present this material in a way which will not only impress it firmly upon the mind of the student, but which will also render it of daily service to practitioners by reason of its definite instructions as to the choice of various agents which may be employed.

But the object of the present work is not so much the laying down of precise rules that are to be conned and learned by rote, or the presentation of the materia medica in a tabular form to be learned and applied in a machine-like manner; but it is to teach *rational therapeutics.* And, as is aptly remarked, rational therapeutics at the present day does not consist in a knowledge of doses and the materia medica, but exists as a complex art in which knowledge and its proper application, based on common-sense principles, go hand-in-hand. It is simply in conformity with the idea that is becoming more prevalent every day; the doing away with the shot-gun prescription of the days of empiricism, and the employment of medicines in a direct and scientific manner, based on *principles*, not on feats of memory.

Dr. Hare has been able to attain this object by embracing in the one volume a treatise on therapeutics and on treatment, each part being alphabetically arranged, yet so correlated by references that the student will have the least possible difficulty in learning and remembering the nature of his therapeutic resources, and in using them to the best advantage when brought to face the various diseases in fact, instead of in print.

The book is concise in the fullest sense of the term; to such an extent, indeed, that it may receive the criticism of some who would expect to find reference to such remedial measures as hypnotism, electricity, etc., which do not find a place in it. Regarding the latter, however, excuse is made that it is of such importance as to justify its relegation to special treatises.

In the portion of the work dealing with treatment, the author has secured the assistance of gentlemen well known in connection with special subjects. Thus Dr. Barton Cooke Hirst writes upon treatment of diseases of the puerperal state; Dr. G. E. DeSchweinitz upon treatment of diseases of the eye; Dr. J. Howard Reeves upon treatment of diseases of the throat and nose, and Dr. Edward Martin upon antiseptics and the treatment of venereal diseases.

HOW TO EXAMINE FOR LIFE INSURANCE. By John M. Keating, M.D., President of the Association of Life Insurance Medical Directors, etc. P. Blakiston, Son & Co., Philadelphia.

The author asserts that his endeavor, in writing this book, was to give to the medical examiner for life insurance a manual which would be plain and practical, free from matters that are not of direct interest to him in the examination of an applicant for insurance, but at the same time sufficiently instructive to recall to his mind all the important points in relation to physical diagnosis that are likely to be of value to him.

To a medical examiner this is a valuable work, giving, as it does, many hints that prove of great assistance in arriving at an estimate of the propriety of recommending or rejecting an applicant, hints which of course are not to be found in books on physical diagnosis or other strictly medical works. The philosophy of the careful regard maintained by insurance companies concerning the relation of weight to height, the probable influence of the use of alcohol, etc., are elucidated in an entirely satisfactory manner.

In Part II. of the work are incorporated the Instructions to Medical Examiners of many of the leading insurance companies of the country.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS, Vol. 6, No. 3, 1890. Containing:

I. Bronchial Asthma: Its Causes, Pathology and Treatment. By John C. Thorowgood, M.D., F.R.C.P.

II. Convulsive Seizures. By S. Hughlings Jackson, M.D., F.R.C.P.

III. Surgical Treatment of Diseases of the Brain. By Ernest von Bergmann, Berlin.

Vol. 7, No. 3, July, 1890, containing:

I. Stricture of the Rectum. By Chas. B. Kelsey, M.D.

II. Influence of Heredity on Alcoholism. By Dr. Paul Sollier, Paris.

III. Rabies. By Louis Pasteur, Paris.

IV. Colotomy. By Thomas Bryant, F.R.C.P.

V. Massage of the Abdomen. By Dr. Rubens Hirschberg.

Monograph I will be found to be a valuable contribution to the literature of bronchial asthma. The second monograph, on convulsive seizures, briefly epitomizes the more modern aspects of the subject. The immense

strides which cerebral surgery has taken of recent years are accurately depicted in the painstaking article by Von Bergmann, the celebrated German surgeon.

Monograph I, July number, on Stricture of the Rectum, is a concise, practical presentation of the subject. The comparative values of the different methods of treatment are fairly stated. The monograph by Dr. Sollier, on the relations of heredity to alcoholism, is a masterly exposition of the subject, which any one at all interested in the matter can ill afford to overlook. His views are rather peculiar, and would lead to the admission, for a large number of alcoholics, of the plea of legal irresponsibility. He devotes to each phase of the subject a thorough consideration. Statistics to support his views form no important part of the essay, which was deemed worthy of being adjudged the Aubanel prize, from among a number of competitors. The article by M. Pasteur is a lucid presentation of the character of his world. Bryant's essay is an interesting plea for the superiority of the lumbar over the iliac incision in colotomy. The prints are all well taken, and merit thoughtful consideration. The monograph by Dr. Hirschberg gives a brief glance at one of the most fruitful fields for massage, that of the abdomen. These two numbers of the monographs compare very favorably with those preceding ones.

Wood's Medical and Surgical Monographs, Vol. 7, No. 2, August, 1890. Containing:

I. Morbid Blushing: Its Pathology and Treatment. By Harry Campbell, M.D.

II. Alcoholism in Women. By Dr. Thomeuf, Paris.

III. The Different Methods of Lifting and Carrying the Sick and Injured. By Geo. H. Darwin, M.D.

IV. The Treatment of Ingrowing Toe-Nail. By Joseph Amiard, M.D.

V. Chronic Bronchitis and its Treatment. By William Murrell, M.D.

Before receiving these monographs we were not aware of the importance in pathology that blushing possessed; but twelve chapters of the above monograph convince us that a vast amount of relief may be afforded the apparently over-bashful portion of humanity by the application of the instruction derived from its pages.

The methods of lifting and carrying the sick is a practical subject, especially interesting to those connected with dispensary and hospital service; while the last two monographs should command the attention of all specialists as well as practitioners, dealing as they do with maladies that, while not exactly omni-present, are common enough to bring about frequent "street consultations" as well as the more legitimate and welcome.

Transactions of the Southern Surgical and Gynæcological Association. Vol. II. Second Edition. Held at Nashville, Tenn., November 12, 13 and 14, 1889.

Comment on the scientific value of the transactions of this Association is superfluous to any who know anything of it as a society, or of its members as individuals. It is composed of the best element of the South and of not a few of the same kind from the North.

We had the honor of presenting in the Review abstracts of many of the papers contained in this compilation; in it the opportunity is now given to read them entire.

The careful work of the Secretary, Dr. W. E. B. Davis, stands out as prominently in this as in the first volume. To mention all of the specially interesting articles contained, we should have to include the whole list, in which originality, progress and individuality are depicted without exception. The increase in the size of the volume to nearly double that of the first one, attests the rapidity of the growth of the Association.

Essentials of Anatomy and Manual of Practical Dissection, Together with the Anatomy of the Viscera. Prepared Especially for Students of Medicine. By Charles B. Nancrede, M.D., Professor of Surgery and of Clinical Surgery in the University of Michigan, Ann Arbor; Late Surgeon to Jefferson Medical College Hospital, etc. Third edition revised and enlarged. Based upon the last edition of Gray's Anatomy. Philadelphia: W. B. Saunders, 913 Walnut Street. 1890.

Of all the numerous "anatomical remembrancers" and compends of anatomy that have been issued of late years, the present one will probably prove most serviceable to the student, both because of the excellence, clearness and accuracy of the full-page colored lithographs, which make up one third of the work, and the simple and direct method employed in the text. It is a book which can be utilized to good advantage in the dissecting room and the quiz class.

For accomplishing the end sought, we give it our hearty endorsement.

Physical Diagnosis and Practical Urinalysis. An Epitome of the Physical Signs of the Heart, Lung, Kidney and Spleen in Health and Disease. Edited by John E. Clark, M.D., Professor of General Chemistry and Physics in the Detroit College of Medicine. 41 illustrations. Cloth, 12mo., 200 pages; price, postpaid, $1.00. Illustrated Medical Journal Co., Publishers, Detroit, Mich.

In the arrangement of this work the object has been to present to the medical student and practitioner a systematic and condensed course of Physical Diagnosis and Urinalysis. The portion on Urinalysis will be found to consist of two parts, practical and reference. The editor believes there is a demand, in many medical schools and by many medical students, for a short, definite course of organic chemistry, touching alone on

those subjects of every day interest to the medical practitioner, such as the analysis of urine, chemical and microscopical; the examination of sputa, bile, blood, bacteria, etc.; methods for the quantitative estimation of the more important urinary constituents, normal and abnormal, such as urea, chlorides, sugar, albumen, etc. To meet these requirements the editor has compiled this volume. Teachers in the laboratory will find the work of advantage as giving the plan for definite instruction with such manipulatory details as will enable students to pursue the course of urine analysis with the minimum of assistance. This is essentially the same as the course given by the editor in the college with which he is connected. Plates have been introduced as needed to still further assist in elucidating the text.

Practical Sanitary and Economic Cooking, Adapted to Persons of Moderate and Small Means. By Mrs. Mary Hinman Abel.

To this essay was awarded the first prize among seventy competitors, and the unanimous opinion of the able Judges of Award, and testimonials from members of the American Public Health Association prove that it is a work of great practical value, and that it would in many cases assist in securing to families health, comfort, and happiness in life, if it could be placed in their hands. It would be of immediate and permanent benefit, and especially assist in bettering the condition of those for whom it is principally intended.

While the economic character of the book makes it especially adapted to persons of moderate and small means, it will prove useful in every household, and while it would be helpful to experienced housekeepers, it will prove also especially so to those, who sometimes without much knowledge or experience in domestic life and duties enter married life.

For the convenience of the American Public Health Association it has been arranged that business connected with the several essays shall be transacted under the immediate supervision of Mr. Henry Lomb, in whose integrity, judgment and motives the Association has full confidence, and all communications relating to the same should be addressed: Essay Department American Health Association, P. O. Drawer, 289, Rochester, N. Y.

These books can be obtained from J. H. Chambers & Co., 914 Locust St., St. Louis, Mo.

LITERARY NOTES.

Annals of Surgery.

In the October number of this journal we note two excellent originals, "The Dry Treatment for Open Wounds and Ulcers," by Dr. Henry T. Byford, of Chicago, and "Three Laparotomies on One Patient," by Dr. H. C. Dalton, of this city, the latter illustrating in a remarkable manner the wonderful efficacy and resources offered by modern methods of abdominal surgery.

The editorial articles pertain to Drainage of the Peritoneal Cavity; Surgery of the Gall-Bladder; Resection of the Articular Cavity of the Hip on Account of Septic Epiphyseal Infection; and The Development of Callus after Fractures of Long Bones.

There are reports on progress in Operative Surgery, Surgery of the Extremities, Genito-Urinary Organs, Tumors, Bones, Joints, Orthopædic, and Gynæcological.

Published by J. H. Chambers & Co., 914 Locust St., St. Louis, Mo.

The Queen.

The Queen's last "Free Trip to Europe" having excited such universal interest, the publishers of that popular magazine offer another and $200 for expenses to the person sending them the largest list of English words constructed from letters contained in the three words "British North America." Additional prizes consisting of Silver Tea Sets, China Dinner Sets, Gold Watches, French Music Boxes, Portiere Curtains, Silk Dresses, Mantel Clocks, and many other useful and valuable articles will also be awarded in order of merit. A special prize of a Seal Skin Jacket to the lady, and a handsome Shetland Pony to girl or boy (delivered free in Canada or United States) sending the largest lists. Everyone sending a list of not less than twenty words will receive a present. Send six U. S. 2c. stamps for complete rules, illstrated catalogue of prices, and sample number of *The Queen.* Address The Canadian Queen, Toronto, Canada.

CORRESPONDENCE.

YOUNG MOTHER.

Alto, La., September 29, 1890.

Editor Review.—I can discount Dr. Wales' case, (published in your journal of the 20th inst.) by four months. On the 21st inst. I was called to see a negro girl, æt. 11 years and 8 months, who had been in labor twenty-four hours. A healthy living girl baby was delivered and both mother and child doing are well.

A. T. Evans, M.D.

Ointment for Chapped Hands.—According to the *Journal of Cutaneous and Genito-Urinary Diseases*, the following is an excellent application for chapped hands: Dissolve one part of boric acid in twenty-four parts of glycerin; add to this solution five parts of anhydrous lanoline and seventy parts of vaseline. The mixture may be colored and perfumed.

When all else has failed, turn to McArthur's advertisement on title page, read it and place your patient on the use of their Syrup.

SELECTIONS.

THE TREATMENT OF WRITER'S CRAMP AND ALLIED MUSCULAR AFFECTIONS.

BY JULIUS WOLFF,

Writing Master, Frankfort-on-the-Main.

(Communicated by D. Ferrier, M.D., F.R.S.)

In the year 1882 I was called to Paris by Prof. Charcot, to apply my method of treating writer's cramp. A note on the subject appeared in the *Progres Medical* of January 21, 1883. On August 21, 1883, the *Berliner klin. Woch.* also published an article on my method. Soon afterward Prof. von Nussbaum published his treatise on "The Cure of Writer's Cramp," in which he mentioned my method in highly flattering and appreciative terms.

Since then various medical journals as well as numerour medical writers in Europe and America have more or less fully discussed my method of treatment. I was very much impressed by the fact that for some reason all the various writers laid stress upon the presumed fact that my method could neither be classified nor described, nor could its effects be theoretically explained. For a number of years I have been anxious to explain my method, and I have always been ready to demonstrate the supposed secret of my treatment to the medical profession. The term "writer's cramp" is not sufficiently explicit; it would be preferable to term the ailment "debility of the muscles or nerves of the hand" (paresis), or, better still, "neurosis of the hand," which term is already applied to this functional ailment by many.

The person affected by it has no longer any control over his movements; if he is a writer, he can not use his pen; if he is a painter, he can not use his brush; if he is a telegraphist, he cannot manipulate his instrument; if he is a violinist, he cannot play his violin. We have also a cigar-maker's cramp, a smith's cramp, a tailor's cramp, an embroiderer's cramp, a milker's cramp, a stutterer's cramp, a ballet dancer's cramp. Even in the exercise of the medical profession, cases of cramp occur through the use of special instruments, mainly among aurists, dentists and oculists, although such cases are not generally considered as cramps. As, however, these ailments are usually designated by the general term of "writer's cramp," I shall, for the sake of brevity, retain that term.

The muscular affection at first only causes slight darting pains or spasms, sometimes uncertainty in the movements, or a slight, cramp-like sensation in the flexor or extensor muscles, the hand gradually refusing to perform certain voluntary movements. To the cramp of the flexors of the hand or fingers is joined that of the extensors, and from this arises gradually a tremor —the so-called writing tremor—which is characteristic of one of the worst forms of writer's cramp.

Sometimes the patient is unable to hold anything with his fingers—the paralytic or paretic variety of the writer's cramp. Similar nervous symptoms may also be observed in cases where the lower extremities are unduly exercised; all patients suffering from functional cramp are hyperæsthetic neuropathics.

Frequently, but not in all cases, the nervous hyperæsthesia affects the entire organism; in many instances it will appear in the lower or upper extremities, sometimes synchronous, and similarly in the arms and legs; sometimes also, but more rarely, alternately; in some very rare instances also simultaneously in all the extremities.

About two years ago I had in London a patient under treatment whose great toe of the right foot made exactly the same movement as the thumb of his right hand whenever he essayed to write. In some instances patients are found in whom the disease migrates from the right arm to the left, and in the so-called "writer's cramp," more than any other kind of cramp, the abnormality of the various movements of the hands and the fingers is to be traced to the morbid disproportion which has arisen between the center of volition (the brain), the nervous conduits, and the action of the muscles, which is mostly passive.

For the cure of this disease I employ, as is already known, massage and gymnastic exercises, both of which, in addition to the material and mechanical influence which they exercise upon the various functions of the nerves and muscles, have the far more important and essential object of acting upon the psychically affected center—that is, upon the morbidly affected will of the patient—and thereby to moderate the action, or, rather, by drawing the attention from the affected point to influence some new action of the mind. This is my real secret; the most untiring and intelligent practice and an exact knowledge of the ailment and of the patient are required in order that the best material and moral effects may be attained by directing the attention and the comprehensive powers of the patient to a neutral field.

While this is being done in a suitable manner, I endeavor by active or passive, special or general movement, as the case may require, to strengthen the muscles, above all other things trying to gradually stimulate the usual morbid movements to a different action by means of involuntary contrary movements suitable to the case and the patient, continuing this treatment until the patient, without knowing it, and almost without intending it, habituates himself quite mechanically to the passive regular movements which I have taught him to execute. As a matter of course, to insure success in a manipulation so delicate, the gravamen lies in the efforts being exclusively directed, to get absolute command of the attention and will of the patient, which presents no very serious difficulty, when the attention of the patient, for a time at least, is drawn from this disease, by any amusement or occupation unfamiliar to him, even should the disease be accompanied by pain.

In a case of this kind, where the disease is usually

not painful, the active operator should find no difficulty in making the patient gradually lose his nervousness, which is important and indispensable for effecting a cure. This may be effected by the rational employment of massage and gymnastic exercises, which, under the direction of an able, practical and expert practitioner are in most cases perfectly successful. There being, as already observed, only certain groups of muscles and certain nerves involved, which can be exactly determined by special movements, particular attention must be paid to the treatment of these, and as soon as the patient is able to effect the prescribed movements with the arm, hand, or foot, readily, freely and regularly, he is in a fair way to a speedy and complete recovery. As in writing or in playing certain instruments, a number of small muscles are set in motion, it is, in cases of this kind, necessary to continue the treatment for a somewhat longer period, as not only must new movements be perfectly learned, but the old ones be entirely forgotten. The patient must assist by perfect confidence and great diligence.

In all cases where a patient, aided by practical advice, followed my treatment, and was convinced of its usefulness and efficacy, the success was always complete, and a permanent cure effected. The latter, however, depends entirely upon continuing the gymnastic exercises which are necessary, even after the treatment is discontinued, to ensure the permanence of the effect. Cases of relapse have not as yet occurred to me, although I fully admit their possibility in cases where the patient neglects the prescribed gymnastic exercises.

The true reason of the major part of functional cramps is to be found in a peculiar neuroses, manifesting itself in altered peripheric muscular action.

This, then, is a true and, I trust, clear, theoretical explanation of all that I think requisite for the treatment of the various kinds of cramp, and especially of my own method of treatment. I trust that my explanation may be of some practical use to all those who occupy themselves with the treatment of this kind of disease.—*Brit. Med. Jour.*

EARLY OPERATIONS IN PURULENT PERITONITIS.

BY JOSEPH PRICE, M.D., OF PHILADELPHIA.

Read before the American Medical Association, Section of Surgery, May, 1890.

In operations for purulent peritonitis, the results have been almost uniformly satisfactory. Dr. Bantock, in a late discussion, said that in opening the abdomen for these cases, he has been very much disappointed with the results. Possibly, he says, he operated too late, but always with unsatisfactory results—drainage did not seem to make any difference for all the patients died. Such an experience from such an operator is a most telling argument for the early interference which he has advocated in other abdominal troubles.

No case of general puerperal peritonitis will recover without operation. Where there are simple inflammatory signs without localized mischief, which is the focus of the general trouble, recovery will follow general treatment. If there is pus in these cases, the necessity for early operation is as much to be recognized as in any other case or set of cases in abdominal surgery. There is but one treatment for suppurative peritonitis—section, irrigation and drainage. Postponement is more dangerous than the operation, and at the worst only hastens a result which is certain to follow without operation.

In the *Medical Mirror*, May, 1890, is reported a case of general peritonitis, from appendicitis, in which the patient died on the thirty-first day. The results of delay are here too evident, when we take into consideration the numerous cases of appendical trouble, now relieved by prompt operation.

The late Lexington disaster, in which Colonel Goodlow lost his life, by a delay in operating of twenty-four hours, followed by another case in the same city, in which prompt intervention saved the patient, who is now active and well, is also a lesson in cases of this kind.

Further, to illustrate the subject, I introduce the following cases of my own. Other recent illustrations could easily be cited, but these are sufficient:

Case I.—Mrs. B., æt. 28 years. Seen five weeks after labor. High temperature; rapid pulse; rapid progressive emaciation; profound sepsis. Abdominal section revealed thickened omentum adherent over entire pelvis; right pyosalpinx and abscess the size of an orange in the ovary; universal adhesions; six inches of ileum cheesy and disorganized to the mucous coat along the line of adhesion on the right side. A knuckle of bowel was opened in enucleating the appendages; it was trimmed and stitched; there was purulent peritonitis, and one pint of pus free in pelvis, from leakage; appendages removed; cavity irrigated and drained; recovery.

Case II.—Mrs. M., æt. 24 years. Seen twenty-one days after labor. Abdominal section showed acute puerperal pyosalpinx on the left side, and general purulent peritonitis; bowel, omentum, and pelvic organs matted together by friable adhesions; left tube gangrenous; right tube removed; irrigation and drainage; recovery.

Case III.—Mrs. W., æt. 36 years. Seen twelve days after labor; most profoundly septic. At the section universal friable adhesions were found; both appendages absolutely gangrenous; uterus large and soft, with cheesy walls; removal of both appendages; irrigation and drainage; recovery.

Case IV.—Mrs. F., æt. 23 years. Seen four weeks after labor; removal of both appendages for left pyosalpinx and ovarian cyst; right tube occluded, adherent, and acutely inflamed; adhesions universal; general peritonitis; irrigation and drainage; recovery.

Case V.—Mrs. S. Seen two years after labor. She

had puerperal fever and was in bed nine months; since then has been a hopeless invalid, with loss of locomotion, constant agonizing pain, great emaciation, constant nausea and recurring attacks of peritonitis. I removed a left pyosalpinx and ovarian abscess; dense bowel adhesions; omenteum, bladder, and uterus glued together; irrigation and drainage; recovery from the operation and cure.

It should be noted that:

1st. All were cases of true puerperal "fever."

2d. All were saved by section, after well-directed medical treatment.

3d. The operations were undertaken to save life, not to demonstrate ideal surgical procedures.—*Med. News.*

Some Therapeutic Uses of Buttermilk.—This is the title of a paper by Stanley M. Ward, M.D., of Scranton, Pa., in the June number of the *Therapeutic Gazette.* He relates a case of Bright's disease reported by Dr. Henry D. White, in which no alleviation was brought about by the ordinary remedies. The patient finally, by her own solicitation, was given buttermilk, the use of which was followed by the happiest results.

Another case is related in which on several occasions the urine under heat and acid was almost solid in the test tude. The ordinary drugs failed to give any relief. The patient began taking buttermilk, two quarts a day. Its effect being markedly favorable, the quantity was increased, and from this time the chief reliance was put on this agent, and the patient finally used from six to eight gallons a week.

Diminution in the quantity of urine passed, constipation and headache followed invariably if the supply of buttermilk became exhausted; and, finally, an examination of the urine, made one year and nine months after the first observation, the patient during a great part of this time having been engaged in his usual avocation, revealed the fact that minute quantities of albumen were still present.

He speaks of its use in stomach affections, the principal symptoms being eructations and vomiting. In cholera infantum the stomach may often be quieted by interdicting everything else, and using a few drops of fresh ice-cold buttermilk at intervals, ranging in length according to the severity of the case.

We have used buttermilk in our practice since the fall of 1881, as a therapeutic agent—food or drink, we hardly know which. When an acid was craved by the patient, and lemons were not on hand, fresh, cool buttermilk was ordered, quantity of buttermilk was restricted to one-half gallon a day. He relied upon this fluid food for about six weeks until complete recovery; although he was tempted with and given food of various kinds, he retained a relish for buttermilk.

The buttermilk craze is on, and while the physician must not lose his head, it is a safe rule to utilize agents within the reach of all, both as a food and a medicine when they meet the indications, and never despise the day of small things, and the use of common things.—*Kansas Med. Jour.*

Fallacies Concerning Syphilis.—Dr. E. L. Keyes, in a recent number of the "Physicians' Leisure Library," has thrown together the following thirteen fallacies, which he has found to be entertained, to a greater or less extent, by the profession or the public, for the purpose of correcting them:

1. That syphilis is necessarily a severe disorder, disfiguring its possessor, entailing social ostracism, destroying the domestic life of its victim, and impressing its stamp upon his issue from generation to generation.

2. That there are essential differences in the quality of the syphilis poison—in other words, there is a mild and a virulent syphilis, *per se.*

3. That a local sore appearing upon the penis after sexual exposure, necessarily means that a poisoning of some sort has been experienced, while a recurrence of sores upon the penis without further exposure is proof positive of syphilis.

4. That syphilis is at first a local disorder, capable of modification by local treatment.

5. That syphilis is acquired only during sexual contact, and is contagious only through that channel.

6. That a person with syphilis is so poisoned that he may communicate the malady by any contact of his body with that of another.

7. That mercury is an evil only less serious than syphilis itself, and to be accepted in the treatment of syphilis on the same ground that one would advocate jumping from a high window in order to escape from a burning building.

8. That mercury, when used by the method called the "tonic treatment," effects a cure by virtue of its tonic action.

9. That mercury cures syphilis.

10. That the iodides are less harmful, and as effective, in the treatment of syphilis, as mercury.

11. That the treatment of syphilis consists only in the use of mercury and iodides.

12. That syphilis in the parent often shows itself as scrofula in the children.

13. That the Hot Springs of Arkansas have some specific effect in modifying the syphilitic poison, curing the disease, or at least shortening its duration.—*Virginia Medical Monthly.*

Some Sources of Error in Sounding for Stone.—Mr. Buckston Browne (Harveian Society, of London) said his first proposition was, that in cases where the prostate was enlarged, stones are often missed when the bladder is examined, because the sound has not reached the bladder, but is arrested in the prostatic urethra. He illustrates this by several examples, and expressed an opinion that in many cases where the bladder was found contracted and the sound could not be turned, the real

truth was that the sound had never entered the bladder. Next he proved that many stones were missed because the post-prostatic pouch is not explored. It was shown that in certain cases it was very difficult to explore this pouch by means of instruments passed in by the urethra, and that in certain other cases it was impossible to do so, and that in these rare cases the only way to thoroughly search was by means of supra-pubic incision into the bladder. Several interesting and important cases from the author's personal experience were cited in illustration. The sound described was of solid burnished steel, with a round smooth handle, a shaft ten inches long and equal to No. 7 of the English scale, ending in a smooth, broad, flat beak, exactly like the end of a broad, flat-bladed lithotrite. The author asserted that the beak of this instrument allowed it to ride easily over the bar at the neck of the bladder, and that it was not caught in one or other prostatic sinus as the end of the ordinary sound was so prone to be, and that when in the bladder it slipped more easily than an ordinary sound under a projecting prostatic middle lobe, and so enabled the surgeon to thoroughly search that favorite habitat of a stone—the post-prostatic pouch.—*Medical Press and Circular.*

Sanger on the Abuse of Purgatives.—Prof. Sanger said that the abuse of these drugs caused, not habitual constipation, but rather "artificial constipation." The evil was most prevalent amongst women with chronic pelvic diseases, real or imaginary. He ordered, in such cases, that all purgatives be discontinued. He never had bad results, even when constipation lasted for over a week. Belladonna was the only drug he ever used when flatulence, etc., set in, and when the constipation lasted for very long. He objected to dieting, which kept up a pernicious feeling of invalidism, and, finding that the patients drank little water, he made them take several glasses of filtered water daily when fasting; occasionally whey or butter-milk was given as a change. Fruit, brown bread and exercise were recommended. Prof. Sanger found this treatment far better than massage, visits to watering places, enemata, and other familiar means to the same end. In the long run his patients had natural actions of the bowels, and were cured of their invalidism.—*British Medical Journal.*

Is Removal of the Tonsils Dangerous?—Removal of the tonsils by the bistoury or guillotine is a popular operation in this country. The French are less partial to it, and MM. Quenu and Lucas-Championniere have recently dwelt on its dangers at the Paris Societe de Chirurgie. The latter surgeon referred to two cases in Broca's practice where profuse hæmorrhage followed removal of the tonsils. In one of these instances the patient, a medical student, died almost immediately after one tonsil was cut, so violent and uncontrollable was the bleeding. In a case in M. Lucas-Championniere's own experience the patient, a middle-aged man had enlarged tonsils, quite free from inflammation, and he was not subject to any morbid condition liable to prevent the natural arrest of hæmorrhage. On removal of one tonsil hæmorrhage took place, and could not be checked until after two hours of digital pressure with a tampon soaked in ergotin. M. Quenu always uses the galvano-cautery three or four times, at intervals of a fortnight, and atrophy of the tonsil always follows. MM. Marc See and Chauvel do not dread the knife. There can be no doubt that hypertrophy of the tonsils requires active treatment, especially in youth; the evil consequences of neglect are well known. In the majority of cases the risk of dangerous hæmorrhage is very slight; but the possibility of its occurrence should always be borne in mind, and the use of ice or of a styptic gargle should be enforced as a measure of precaution immediately after the operation. —*British Medical Journal.*

Local Treatment of Diphtheria.—Dr. Alfred Stanley (Birmingham), in the *British Medical Journal*, December 14, 1889, says:

Diphtheria at the present time seems to be rather active in many districts, and I therefore think it a good opportunity to lay before you the claim of the sulphur treatment, which by many has come into a certain amount of disrepute. I used the sublimated sulphur and by three methods. To the third, however, I am inclined to give by far the greatest credit.

1. By means of a tube blow a portion, say half a drachm, of sulphur, over as much as can be covered of the diphtheritic membrane.

2. Gargle with a solution of the sublimed sulphur, or if preferred, with sulphurous acid mixture.

3. By the inhalation of the fumes of burning sulphur. I recommend that first means should be used twice a day, night and morning, and that the two latter ones every two hours.

Now I claim for the latter that no fungus can possibly exist under the fumes of burning sulphur, and that its action is to completely shrivel up the diphtheritic membrane, putting to death the micrococci as fast as they are formed, the membrane eventually peeling off, leaving a healthy healing surface.

I trust these remarks may be of service to some of your readers in causing them to persevere with the sulphur treatment, which, I am afraid, in many cases, when tried, is discarded too soon. So far, I myself am quite satisfied with its results.—*Canada Med. Rec.*

Morphine as an Antidote to Atropine.—A case of considerable interest occurred at Chadarghat, in Hyderabad, recently, and is reported in the *Medical Record* of Calcutta. A medical student who was a great sufferer from neuralgia, for which he was accustomed to take

antipyrin, went to indulge in his customary dose, but hit upon the wrong bottle, and took six grains of atropine instead. In a few moments he became unconscious and fell. He was seen by a brother medical student, who instantly ran off and called Surgeon-Major Edward Lawrie. An emetic was speedily given, and the stomach-pump used to wash out the contents of the stomach. The patient, however, seemed to be rapidly sinking from the effects of the drug. The pupils were dilated to their fullest extent, there were foaming at the mouth, stertorous respiration, and a rapid intermitting pulse. The condition seemed hastening towards the end, when Dr. Lawrie thought he would resort to the antagonistic effects of morphine, and injected one grain of this drug subcutaneously, with no apparent effect. He then injected another grain, but with no decided result. The patient, though still alive, seemed hovering in the balance between life and death. From eight o'clock in the morning till three in the afternoon artificial respiration was resorted to with varying intervals of rest. Dr. Lawrie now determined to try the hypodermic injection of one-third of a grain of morphine, and this seemed to be the determining antidote, for in an hour the pulse improved, the breathing gradually resumed its normal stand, and consciousness returned.—*Lancet.*

Transplantation of the Shell Membrane of the Egg.—According to Haug, in the *Wiener Med. Presse*, April 20, 1890, the lining membrane of the shell of the hen's egg may be used to restore deficiencies in the tympanic membrane. The outer surface is to be placed in juxtaposition with the remaining membrane. It is also essential that the margins of the perforations be freshened, which may be accomplished best by means of a small currette bent at an angle. The experiments of Haug demonstrats that when the proper details are observed a true organization of the transplanted membrane takes place and not a mear adherence. It is possible that this principle may find general surgical application.—*Med. and Surg. Rep.*

Necessity of Caution in the Use of Hypodermic Injections of Philocarpine.—Dr. Holtenhoff, of Geneva, recommends that the utmost caution should be used in regard to subcutaneous injections of pilocarpine. He has observed cases where even 1-100th gr., or 1-75th gr. of the drug gave rise to such disagreeable accessory effects as collapse with cold sweats and an agonizing sensation of impending dissolution. Not more than 1-200th gr. should be the dose to commence with. According to the author's estimation, even 1-100th gr. may prove sufficient to kill an adult man.—*Brit. Med. Jour.*

[Our impressions are so fully in accord with the above that we give it with our hearty indorsement.]

USEFUL FORMULÆ.

Hydrastinine in Menorrhagia.—Hydrastinine is obtained by oxydizing hydrastine. It may be given subcutaneously without pain, in doses of one grain of a 5% solution. Shortly after its administration there are light uterine pains. In ordinary cases of menorrhagia it acts well. In cases of pyosalpinx it has acted favorably. The usual formula is as follows:

℞ Hydrastinine, - - - - gr. j.
Aquæ dest., - - - - ʒij.

M. Sig.: Six minims once or twice daily.

In hæmorrhage due to endometritis or myomata, the percentage of favorable results has been large. No evidence of the effect of hydrastinine in labor is furnished, but it is probable that it will be favorable, because it contracts the vessels, and uterine pains result. The best time for its use is six to eight days before menstruation, which was rendered profuse by textural changes in the uterus.—*Buffalo Med. and Surg. Jour.*

Lotion for Vulvar Pruritus.—Percy gives the following:

℞ Acid phenic., - - - 1 g. 13.
Tinct. opii, - - - 15 g. (fl ʒiv.)
Acid. hydrocyanic, - 7 g. (fl ʒjss.)
Glycerin, - - - 15 g. (ʒiv.)
Aquæ, - - - 120 g. (fl ℥iv.)

On the other hand, M. Scanlan indicates, as an excellent remedy for the same trouble, the application of a pomade with the following formula:

℞ Cocain. hydrochlorat., - o. g. 6 (gr. ix.)
Lanolin, - - - - 30 g. (ʒj.)—M.

Sig.: Ointment. Apply a small quantity to the parts.—*Med. Bull.*

Cocaine Toothache Pellets.—

℞ Cocaine hydrochlor., - - grs., 15.
Opium, - - - - - " 60.
Menthol, - - - - " 15.
Althea, powd., - - - - " 45.

Make into a mass with glycerin and gum arabic, and divide into pellets weighing one-half grain each.

One of these placed in a hollow, aching tooth is said to give prompt relief.—*Zeits. d. allg. Oest. Ap. V. Meyer Brothers' Druggist.*

Iodoform Pills Against Hæmoptysis, as recommended by Chauvin and Jorissenne:

℞ Iodoformi, - - .05 (gr. $^5/_6$).
Ext. gentianæ q. s.

For one pill.

One and one-half grains of tannin may be added to each pill. Iodoform is said to be of great service in cases where ergotin had been without avail. Further, it is stated that iodoform given in pill-form does not disturb the stomach.

ORIGINAL ARTICLES.

WIRING THE SEPARATED SYMPHYSIS PUBIS, SUPPLEMENTED BY A NOVEL PELVIC CLAMP.

BY WILLIS P. KING M. D., KANSAS CITY, MO.,

Assistant Chief Surgeon Missouri Pacific Railroad.

Read before the Mississippi Valley Medical Association at Louisville, Ky. October 9, 1890.

I would not deem it necessary under any circumstances to tire the patience of a body of physicians by going over the entire question of Fracture of the Pelvis as an introduction to a paper of this character; and I deem it especially unnecessary before a body of men, such as compose this association. I will, therefore, be as brief as possible, by coming at once to the point. The object of the paper is to report a case of separation of the symphysis pubis, with fracture of the interposed fibro-cartilages, fracture of the descending ramus of the pubis, with deep lacerations of the surrounding soft parts, and, more particularly to report the methods resorted to in order to support the pelvis and reenforce the ramus after the pubis had been wired together.

Bonnie Jacobs, æt. 20 years, single, a hearty, well-developed country boy, brakeman on a freight train on the Missouri Pacific Railway, while making a coupling at Harrisonville, Mo., on March 25, 1890, fell down with one leg under a brake beam and the other over it, holding on to some part of the car with his hands, he was shoved about one car length, the brake-beam crushing into the anterior portion of the pelvis, fracturing the descending ramus of the pubis, separating the symphysis and lacerating the surrounding soft parts, as hereafter described. He was received at the Missouri Pacific Railway Hospital at Kansas City during the night following, and as it was found upon examination that there was no hæmorrhage, the parts were cleansed and packed with bichloride gauze, his urine drawn off and he was put to bed until morning. On the morning of the 26th he was placed upon the operating table and anæsthetized, and a careful examination was made. The pubic symphysis was found to be separated about two inches, the inter-articular fibro-cartilages were each broken into three or four pieces, the descending ramus of the pubis on the right side was fractured; the inner border of the adductor longus muscle was lacerated and there were extensive lacerations of the soft parts above the pubic arch, exposing the bladder and extending on the right side into the right inguinal region. These deep lacerations above the pubis embraced the skin and all of the underlying muscles and tissues in the supra-pubic region down to the bladder and extending upward to the right and left; but the lacerations on the right side extended somewhat higher up than those on the left. The fragments of the fractured cartilages were removed and the centers of the opposing surfaces of the separated pubic arch were roughened with a chisel—the edges being already roughened in the separation; then, with a common drill and a small dental tool, two holes were drilled in each side. These holes began about three-fourths of an inch back from the edge on either side and the tool was permitted to emerge just above the inferior surface of the bone. A strong silver wire (the largest made) was passed through each of these, and while an assistant pushed upon the pelvis from each side until there was coaptation of the separated symphysis, the wires were twisted down, cut off short, the ends turned down and hammered in between the ends of the bones. The bladder having filled with urine during the operation, was emptied and the deeper lacerated tissues were whipped, quilted and stitched over it with catgut. The irregular torn integment was then drawn into position and closed with silk. Rubber drainage tubes were put in at appropriate points, so as to thoroughly drain the whole injured region. Feeling assured that the two silver wire sutures in the pubic arch would not be sufficient to hold the symphysis together, the patient was then lifted onto blocks—the blocks being under the upper part of the thighs and lower part of the spine; a half gallon rubber water-bag was filled with water and laid over the pubis—covering the entire wounded surface. Two thicknesses of flannel were then thrown around the pelvis, covering about eight inches in width and passing over the water-bag. Over this plaster-of-Paris crinoline was passed and two perforated barrel hoops were worked in between the layers of plaster. The plaster was put on quite thick, so that there would be no spring in it after it set. After the plaster had hardened the stopper was taken from the water-bag and the water emptied into a vessel between his thighs and the collapsed bag removed. This left an ample arch under which to apply the dressing to the wounded parts. This plaster support was kept on for twelve days, but, as he was delirious and the contents of his bowels moved involuntarily, the back part of the cast became so foul as to necessitate its removal. It was then cut away and a drawing of a pelvic clamp was hastily made and sent to the company shops. In the meantime a broad, strong bandage was applied around the hips, extending over the dressings. On the same evening the clamp was received and applied. This clamp was of steel plate, one sixteenth of an inch in thickness and was in two parts, each being fashioned after the plaster-of-Paris cast, which had been sent to the shops. Each part extended over the curve of the hip so that it would not slip up when tightened. The lower part rested on the bed, but did not extend under the body. Each part embraced the pelvis on its side, curved up and over to the iliac fossa and then turned to a right angle upward. The flat surface of this part faced a similar flat surface on the opposite side and when applied without being tightened, were about five inches apart. Through these surfaces three

holes were made in the form of a triangle, and bolts with screws cut on each end, were passed through. The three bolts were necessary, because I knew that with one or two bolts, the clamp would therefore not serve the purpose for which it was made. Taps were put both on the inner and outer side. The reason for this is obvious. The hips being neatly padded, the clamp was applied and the screws being tightened, it was found to be not only an excellent support, but that we could apply as much or as little pressure as was desirable. The supra-pubic wound (which had not all healed by the first intention) was dressed beneath the connecting rods.

The pelvic clamp was kept on until the 30th day after the injury, when as it appeared that there was perfect reunion of the symphysis, it was removed. The patient was delirious for twenty-eight days. He urinated in the dressing, necessitating a change of these. Of course we had suppuration; but as our drainage was perfect and permitted a thorough irrigation of the wounds, we were enabled to prevent the burrowing of pus as well as to prevent the spread of septic material in the surrounding soft parts. For the first thirty days, he had more or less elevation of temperature, the fever at one time rising to 105°F.

He was kept on a water-bag from about the first week until he was able to leave his bed. There was suppuration at the point of fracture of the right descending ramus of the pubis and where the abductor longus muscle was lacerated; for a long while, pieces of detached necrosed bone came away at times. He left his bed for an invalid chair at the end of about five months. Within three weeks after this he began to use crutches and ten days afterwards he threw his crutches away and used only a cane. Now (for the last two weeks) he is walking up and down stairs, everywhere without any support. He is growing strong rapidly, and I feel assured, will in a short time be ready for any duty.

Drs. F. R. Smiley and Geo. F. Hamel, my house surgeons, assisted in the operation of wiring, and Dr. Hamel took personal charge of the case, and the good result is due largely to his indefatigable and unwearying attention, at all times, day or night, when the patient's condition demanded it.

The case suggests some valuable points.

1. The operation of wiring in a case of separation of the pubic symphysis so completely coaptates the parts that it would seem that scarcely any other method of dealing with this condition can be equal to it.

2. The manner of applying the plaster-of-Paris support in the first place, with the use of the water-bag to make an arch under which to dress the wounded parts, is new and original so far as I know, and it is a method that may be adopted and easily practiced by any one who knows how to use plaster-of-Paris.

3. The steel hip-clamp as a permanent support in separation of the pubis is also new, so far as I know, and is a means that may be adopted with benefit in any case of fracture of the pelvis wherein immobilization of the fractured part will conduce to the comfort of the patient and to the union of the fracture.

SOME REMARKS ON THE PREVENTION AND RESTRICTION OF MYOPIA.

BY FRANCIS DOWLING, M.D., CINCINNATI, O.

Abstract of a paper read at the sixteenth annual meeting of the Mississippi Valley Medical Association, at Louisville, Kentucky, October 9, 1890.

Considering all the information at our disposal in regard to the factors that enter into the causation of myopia, both in its starting point and developing stage, no one ought to doubt that the prime factor in this causation, is work with the eyes at near range; therefore it stands to reason that the only way to prevent or restrict the affection, is to limit or prevent altogether this near work with the eyes during the years that are known as progressive ones for the disease, viz: from the tenth to the sixteenth years, and for this purpose I would make the following suggestions:

1. A child, who shows any marked predisposition to myopia, and whose parents, one or both, were affected with the disease, should not be sent to the public schools as they are now constituted, but should be sent rather to some private class, where the number of hours for study and the tasks could be arranged to suit the condition of the scholar's eyes; of course the lighter the tasks and the fewer the hours the better it will be for the eyes; this in any given case could be regulated by the family physician.

A competent medical officer should be appointed by our school authorities, particularly in the larger cities, who should have general charge of the sanitary regulation of our public schools, and who should pay particular attention to regulating the tasks and the number of study hours for such of the pupils as showed any predisposition to myopia. To me it seems very unjust to have a uniform system of tasks and working hours for all pupils alike, in the same grade, irrespective of the physical peculiarities of the individual scholars; for one who inherits a weakly constitution, weak eyes, etc., will necessarily deteriorate physically in trying to keep abreast of a colleague who may be naturally endowed with stronger eyes and stronger physical power.

Whenever the system of one affected with or predisposed to myopia becomes at all relaxed, all work with the eyes should be suspended until the health is again restored to its normal condition; for it must be borne in mind that it is during lowered conditions of the system that certain forms of myopia make their greatest progress.

Young persons who may be predisposed to myopia should never study at night time; all near work with the eyes should be done by good clear sun light; if, however, artificial light is used for this purpose the electric light is the best of all its rivals, such as gas,

oil, etc., being far less injurious to the eyes, for the reason that, in point of color, it more nearly approaches that of the sun than any other artificial light known; then its volume is more uniformly distributed throughout the room—and lastly the light does not vitiate the atmosphere of the room, like gas, oil, etc. If means could be invented to render this light steady, it would be the prince of all artificial lights for near work with the eyes,

Where the myopia predisposition is at all marked, all work with the eyes, such as study, etc., should be postponed until the sixteenth year; the child should be sent to the country and kept out in the fresh air as much as possible.

Glasses should not be worn before the 14th year, and the use of them is optional with the patient, for distant vision at least; as they have very little if any influence in checking the progress of a case of myopia, they are only useful as a means of enabling the wearer to recognize more clearly his surroundings.

In tolerably pronounced degrees of myopia I have found paracentesis of the cornea, by means of a fine needle to do a great deal of good; it relieves the intraocular pressure that is often so very marked in such cases, and thus retards the progress of the myopia. In practicing the operation, after making the puncture in the cornea I usually cause the fluid to escape slowly from the anterior chamber of the eye, by pressing on the cornea alternately with the lower and upper eyelid.

164 w. 9th St.

REPORT ON PROGRESS.

OTOLOGY.

BY J. B. SHAPLEIGH, A.B., M.D., ST. LOUIS.

American Otological Society.

The following notes of the twenty-third annual meeting held on July 15, 1890, are from the *Boston Med. and Surg. Jour.* (July 31, 1890).

On the Renewed Employment of the Nasal Douche and Kindred Procedures.

Several years ago attention was called to the danger of exciting ear trouble by the use of the nasal douche and similar procedures. For some time it seemed that this warning had been heeded. During the past winter and spring the author has seen a large number of these cases, and thought it advisible to again call attention to the dangers that may follow the use of the nasal douche. In a few instances the results of the inflammation have been severe, but in the majority they have been simply an increase of the subacute nasal and aural catarrh.

As a safer and equally efficient method of treatment the use of a spray was suggested. The following preparations were mentioned.

℞ Eucalyptol,
Ol. Gaultheriæ, - - - aa gr. j.
Menthol, - - - - - gr. ij.
Benzoinol, - - - - - ʒ ij. M.

If the patient objects to this, it may be substituted by.

℞ Listerine - - - - 1 part.
Water - - - - - 3 parts.

In the presence of an accumulation of viscid mucus or of crusts, a stream of flowing water will doubtless prove more effective than a stimulating spray. If the latter is used freely and each time during the inhalation of a deep breath, crusts and mucus will speedily cease to play a part in the therapeutic problem. In no instance had he known the use of the mixtures mentioned to cause any unpleasant aural symptoms. The use of sprays must, however, be looked upon only as a valuable method of supplementary treatment, and not as a therapeutic procedure of the first order.—Dr. A. H. Buck, New York.

The Removal of a Bullet From the Ear, With the Assistance of the Galvano-Cautery.

The difficulty occasionally met with in removing a round, hard body from the auditory canal is well known. The first efforts in these cases should be made with a syringe. The writer wished in this paper to call attention to a method which may occasionally prove useful, and which, so far as he was aware, had not been before suggested.

April 30, a boy æt. 7 years was brought to him with a small bullet lodged in the lower part of the auditory canal. An attempt to remove it by syringing was first made, without avail. An attempt with forceps showed the foreign body firmly imbedded, and on account of its smooth surface, it was impossible to grasp it. It then occurred to the operator that it might be possible to melt into the lead the wire of a galvano-cautery, by means of which, when cool, it could be removed, or, if not, to at least roughen the surface to such an extent as to allow forceps to grasp the bullet firmly. The child was put under the influence of chloroform, and the wire was melted into the lead, and the ball was drawn to the narrow part of the canal, where it became detached. The surface of the bullet was then roughened above and below, and with toothed foreceps removed.—Dr. Lucien Howe, Buffalo.

Aneurism First Recognized in the Fundus of the Ear, Later Appearing in the Neck.

May, 1880. Mr. C., æt. 45 years, came under observation complaining of pain in the left ear and symptoms suggesting furuncles. In 1858, he had severe otitis media in both ears for one week, followed by discharge which ceased without treatment. Some deafness has

since existed. For the past seven or eight years he had noticed a pulsating sound, at first in both ears, now in the left. On examination of the left ear, there was seen a circumscribed swelling on the floor of the meatus just in front of the membrana and entirely concealing it. It was soft and fluctuating. Filling the ear with water, a distinct intra-aural pulsation could be seen. The swelling was lanced under the supposition that it was a furuncle. There was a free gush of blood and some three ounces of blood were lost before the flow could be stopped by tamponing. No pus whatever was seen. The tampon could not be permanently removed for several days. Compression by tampon was advised to be continued at home. August, 1880, it was learned that compression had afforded little benefit. Ligation of common carotid was suggested if symptoms were considered sufficiently severe.

March, 1883, patient was again seen. Electrolysis had been tried with asserted diminution in size. March, 1890, the aural tumor was still present, but in addition there was a large aneurismal swelling of the neck below the ear. The patient was then referred to a general surgeon and has not since been heard from.—Dr. Chas. A. Todd, St. Louis.

Dr. Blake's Paper Disk: Case Histories.

The object of the paper was particularly to call attention to the application of paper dressings to the membrana tympani, first suggested by Dr. Clarence J. Blake of Boston, for the treatment of perforations of that structure. To demonstrate not only the advantages claimed for this method, but others modestly disclaimed, and its wide usefulness in other conditions than those defined for its application when originally suggested, the following cases were reported:

The author gives notes of nine cases in which the treatment yielded good results, and sums up with the following

Conclusions. From the case histories given it may be considered demonstrated that Dr. Blake's paper dressings have these therapeutic advantages already claimed; applied to a perforation of the membrana tympani, it performs in a great measure, the functions of the lost membrance, (1) improving the hearing from the time of application, (2) maintaining a normal degree of moisture and temperature in the air of the tympanic cavity, (3) protecting the enclosed tissues from direct exposure to atmospheric influences, and (4) excluding organic and inorganic foreign bodies approching from the external auditory canal; (5) it acts as a local irritant to the edge of the perforation only, thereby inducing reproduction of the lost membrane; (6) as a splint protecting it when forming and preventing its displacement in either direction.

May we not accredit this method with these additional advantages hitherto unclaimed? (1) Improvement in hearing may subsequently result from cicatricial closure of the perforation, not at once appreciable on application of the paper disk; (2) the paper dressing may prove serviceable even where the perforation is quite large; (3) it may be used to advantage where indeed the outer surface of the membrana tympani has not returned to its normal condition; (4) it may prove a serviceable artificial membrana tympani where that structure is almost entirely lost; (5) at the same time may stimulate reproduction thereof; (6) it may serve as a splint when applied to manometric tissue; (7) it may induce conservative structural modification thereof and(8) may by acting here as an artificial membrana tympani at the same time improve the hearing.—Dr. Robert Barclay, St. Louis.

The Effect of Pilocarpine in Traumatic Deafness, and Its Collateral Effects.

The mental effect of pilocarpine when used for deafness has received but little attention, and Dr. Appelberg's paper is very interesting and timely on this account. We quote from the *Times and Register* of July 5, 1890.

Dr. O. E. Appelberg says: I am prompted to publish the following case in view of the fact that since my announcement in June, 1888 (*Novosta Terapii*) of the effect of pilocarpine upon the restoration of hearing, like reports do not cease to appear from time to time; but, as to its collateral effects, no mention is anywhere made.

K. K., peasant, æt. 30 years, well built and preserved, received a scalp-wound while working in a shaft, from the fall of a piece of wood. The wound was at the border of the hairy part, to the right of the median line, parallel to the sagittal suture, about 2½ inches long, and reaching the periosteum. The wound healed quickly. The patient, soon after the accident, became deaf in both ears, and blind in the only eye he had. In order to talk with the patient, it was necessary to bring the lips close to the ear of the patient and speak in a very loud voice. His vision was so impaired that he could not count his fingers at a near distance. Examination gave negative results. Patient complained of dizziness, headache, ringing in the ears; was apathetic, and suffered from insomnia. All the means used to restore sight and hearing (pot. brom., strych., nitroglyc., ect,) did not produce any effect, and only chloral was given for insomnia. On June 22, commenced treatment by pilocarpine injections (pilocarp., gr. iij to anuæ, ℥viij.)

June 22. Watch closely applied; ticking feebly heard by right, none by left. Injected one-fourth of a spritz syringeful of the above solution. In two to three minutes salivation; no sweat.

June 2. Hearing same. Injected one-half a spritz. Copious sweat and salivation. After the sweating, complained of chill.

June 24. Right ear hears ticking at a distance of one and one-half centimeters; left, when closely applied. Injected three-fourths of a spritz. Sweat, salivation and chill.

June 25. Hearing same. Full spritz. Copious salivation and sweating; chill.

June 26 and 27. Status quo. Injected same. After-effects same.

June 28. Subjective feeling of patient raised; vivacious; glad to hear the signal bell. Full spritz; same phenomena.

June 29. Left ear hears ticking at considerable distance; right same. Full spritz; same phenomena.

June 30. With both ears hear the ticking at quite a distance. When talking to him loudly, he hears at a distance of one foot. Full spritz; same phenomena.

July 1. Status quo ante. Ordered solution of pilocarp., gr. iv to aqua same. Sweat and salivation more copious; chill.

July 2. Hears the ticking with both ears at a distance of five and one-half centimeters. Same phenomena.

July 3. Hearing same. Full spritz; phenomena same. While being treated by pilocarpine the constipation disappeared. Complained that during the night some one pricked him with a needle through the wall. To convince him of the impossibility of such a thing we did not succeed.

Having recalled to memory the article in the *Novosta Terapii*, in the case of Waugh,[1] where ext. fluid folior. Jaborandi was given with the collateral result of mania persecutivæ, I suspected the same in my case. To my sorrow, in such a wilderness as this Siberian *Taiga*, I could not collect more literature on pilocarpine.

In the Pharmacologie of Herrmann, Kohler, Nothnagel and Rossbach, in the text-book of Schopera, comparative tables of the effects of drugs by Berlioz, and an old pharmacology by Sakolovski, I could find nothing.

Seeing the favorable action of pilocarpine on the restoration of hearing, and knowing, from the case of Waugh, that the collateral effect of pilocarpine will cease with the discontinuation of the drug, I continued the injections daily.

July 4. Hearing same. Complained that he was being pricked again; that his toes were besmeared with something by somebody; that the "boys play tricks on him."

July 5, morning. Hears better than yesterday; can be talked to without raising the voice. The same complaints.

Evening. The phenomena of mania persecutivæ increased; hallucination by day; being pricked, smeared, and persecuted. Pilocarpine discontinued. Hears even a whisper. At night complained that cold water was being poured on him all the time. Insomnia; chloral.

July 6. Morning. Complains, "I have no rest; wherever I go, they pour water on me." Administration of chloral, slept. Towards evening became calm.

July 7. Hallucinations as before. Insomnia.

July 8. Excitable; refused to take medicine; chloral in alcohol (to deceive him), pot. bromide. Towards evening calmer.

July 9. Status quo. Refuses medicines. Insomnia. Fears everything and everybody; everybody talks about him.

July 10. Status quo.

July 11. Calmer. Only hallucination of hearing left.

July 12. Status quo.

From 13th to 14th, the hallucination decreased.

On the 19 no hallucination. In a few days he was discharged, with normal hearing.—Translated by C. D. Spivak, M.D., from *Russkaya Medicina.*

[1]This case was published during 1887, in the Medical World. It is doubtful whether the mental phenomena there detailed were directly due to the jaborandi, or to its effect in forcing a secretion of milk which nature had never been able to sustain previously.—W.F.W.

Hæmatoma Auris.

Dr. Charles M. Shields reported the history of a case occurring in a lawyer æt. about 60 years, and perfectly sound in mind (the trouble very rarely appearing except in the insane). About a month before the appearance of the growth the man suddenly lost consciousness one day, and, in falling, had bruised the side of his face corresponing to the trouble. The speaker had enlarged an opening found upon the anterior wall of the canal, about an inch from the external orifice. The cavity into which it led would hold about five or six drachms. The discharge was very offensive. A wash of peroxide of hydrogen was prescribed. From one Saturday night until the following evening the patient had five or six hæmorrhages, losing in all about twenty or thirty ounces of blood. The only resource for perfect control of the flow was packing the cavity with cotton saturated in Monsel's solution. The speaker thought the man would recover, but with a considerable scar.—N. Y. *Med. Jour.* Aug. 2, 1890.

TRANSLATIONS.

PROCEEDINGS OF THE TENTH INTERNATIONAL MEDICAL CONGRESS.

TRANSLATED BY DR. F. NEUHOFF, ST. LOUIS.

[CONTINUED.]

Treatment of Syphilis.

Leloir of Lille: When the physician is appealed to as soon as the chancre appears, before the lymphatic glands have become involved, and when the general condition of the patient is good, then excision of the initial lesion ought to be practised. It involves no risk, and although by no means a certain remedy, it may in certain cases protect the patient from syphilitic infection.

Constitutional treatment ought not to be begun before secondary symptoms manifest themselves. Before that time, the diagnosis is always uncertain, and therefore many who have no syphilis at all, will gorge themselves with mercury and iodide much to their detriment; while others who are really syphilitic will imagine themselves protected and will neglect further treatment.

Furthermore, statistics show that syphilis will be evolved exactly in the same manner whether or not preventative constitutional treatment has been employed. The latter is even liable to wear out the organism beforehand.

On the other hand, a chancre may be treated locally by mercurial preparations as, mercuric plaster, or corrosive sublimate lotions.

The diagnosis once established, the following methodical treatment should be employed:

Daily inunctions of from 2 to 4 grammes are practised for 15 days or 3 weeks, and then a respite of the same number of days is taken. This alternation is continued for 10 months. At the same time, the syphilides are treated locally by means of plasters and lotions of mercuric preparations; against rebellious cutaneous syphilides, it is best to use baths containing 7 grammes of sublimate. Hygiene of the mouth should be observed, and the general health of the patient must not be neglected.

During the later months of the first year, and during the whole of the second year of syphilis, inunctions must be given for 10 days and then a respite of from 3 to 6 weeks should be taken.

Purgatives and sudorifics are recommended in order to make the mercury circulate. In case of persistent headache and osteocopic pains which resist general treatment, it is well to give at one dose 2 or 3 grammes of potassium iodide and a gramme of potassium bromide.

At the end of the second year, the treatment varies according to the case. If symptoms have been completely absent for some time, I order at intervals of 3 months, inunctions (2 to 3 grammes) for 10 days, and at intervals, also of 3 months, (a few weeks after the inunctions), 2 or 3 grammes of potassium iodide, to be taken after a meal or in the evening.

If, during the third and fourth year, the patient has been free from all syphilitic symptoms for more than a year, all that is required is to have him use inunctions twice a year (spring and fall) for 10 days in succession, and a month after each course of inunction, to have him take 2 gramme doses of potassium iodide for 3 weeks. This method of procedure should be continued during subsequent years, as long as no syphilitic manifestations appear. Should any manifestations appear however, a thorough course of inunctions should again be pursued.

It is neccessary, in general, to avoid excessive treatment by mercury and iodide, the effects of which are often dreadful (grave cerebral neurasthenia, troubles of memory, dilatation of the stomach). The internal administration of mercury predisposes to this more particularly and is therefore to be employed only when inunctions are impracticable. Cutaneous irritation from inunctions is guarded against by the employment of ointment of mercury which has been freshly prepared with benzoated lard, and by cleansing of the skin, 12 hours after inunctions.—*La Tribune Medical.*

Treatment of Syphilis of the Nervous System

Althaus of London:

1. Prophylactic treatment is of the greatest importance, for these lesions are of extreme gravity. When once established, if left to themselves, they are almost invariably fatal; if well treated they ameliorate, but nevertheless the patient remains under the menace of their return either light or severe. To attenuate syphilitic infection, it is necessary to excise the chancre when possible, and to impose 3 months of mercurial treatment, as soon as secondary symptoms appear. At this period mercury acts as a veritable parasiticide and really purifies the system. Unless this treatment has been followed, all patients are exposed to nervous symptoms, and especially those patients in whom there exists a nervous diathesis, which the author has found, hereditary or acquired, in 59.9% of all his cases.

With some subjects, chagrin, fatigue, privations, exposure to cold and moisture, alcoholic and sexual excesses, and great intellectual labor, act as excitants of specific nervous troubles. For this reason we ought, by all the means in our power, to tone up the nervous system of all patients whom we have made follow a careful mercurial treatment.

2. The curative treatment consists in the hypodermic injection, at regular intervals, of small doses of some mercurial preparation. The best for this purpose is, metallic mercury incorporated with lanoline and then mixed with carbolized oil. This mass is perfectly homogenious and stable. Injections of it are neither painful, nor irritating. They do not lead to the formation of abscesses nor do they cause stomatitis or mercurial dysentery. Iodide of potash and tonics must not be neglected. Electrization, with constant currents, is the best treatment for the ordinary lesions resulting from syphilis.

By the aid of these means, especially if applied in time, we are able, beyond doubt, to ameliorate the prognosis of nervous syphilis.—*La France Med.*

Antipyresis.

Cantani, of Naples: The definitions of fever are numerous and all are more or less faulty. Nevertheless, it may be said that the fundamental element of fever is an exaggeration and alteration of chemical action and change, accompanied by the increased evolution of heat.

All fevers have this in common, that they use up more or less organic elements, and that the chief indication is to diminish this excessive waste by acting on

its immediate cause. This may be accomplished in two ways:

1. By diminishing the temperature by abstraction of heat.

2. By lessening the formation of heat.

The first method consists in cooling off the periphery of the body; the second consists of influencing the heat-producing process at its source, and thus diminishing the exaggerated heat formation.

Antipyretics, act by two methods, sometimes united in the same drug. They are: An action as a parasiticide on the micro-organisms, and a vasomotor action determining a dilatation of the peripheral vessels, and perhaps even a direct action on the thermogenic centers.

Are antipyretics properly so called, useful to the patient? This is a very debatable question, at least in certain cases.

The febrile disease is in fact the result of struggle of the organism against the morbific agent, generally a micro organism. The fever is only the reaction of the sick organism against the alterations brought about by the morbific germ. This reaction is necessary, and if it is lacking, compromises the patient.

Fever is a phenomenon of reaction, influenced by two factors, intensity of infection and power of resistance of the organism.

It is, therefore, not the fever which constitutes the gravity of the diseaso, when the general condition remains good. The prognosis depends, rather, on the quantity and the nature of the morbific agents, on the poisons which they secrete, and on the power of resistance of the patient.

Continuous fever is grave, because it indicates an infection calling for energetic reaction. It is grave, also, because it causes great combustion, and a general exhaustion.

It may be admitted that elevation of temperature has the effect of attenuating the virulence of the microbes, augmenting the action of the phagocytes, and even sterilizing the humors of the body.

Fever is only a symptom which it is not necessary to attack. Treatment should rather be directed against the infectious agent, as is done in giving quinine for malaria, and mercury for syphilis.

In those cases, however, in which a prolonged elevation of temperature becomes hurtful by constant accumulation of products of decomposition, and by feebleness of the heart, there is an indication to use means which diminish the body heat without diminishing the production of the heat itself, without altering the "thermogenesis," which is essential for the power of organic reaction.

Hydrotherapy answers for this purpose, under the form of tepid baths gradually cooled off, cold packs, drinks and clysters.

Antipyretics, which act especially on the production of heat, ought to be discarded, for the organism has especial need of this production of heat in struggling against the fever.

To conclude, it is necessary to aid, guide and sometimes even to moderate the fever in its curative action, but it is never necessary to combat it.—*La Tribune Med.*

Complications and Treatment of Chronic Gonorrhœa.

Jullien, of Paris: There are few cases of acute gonorrhœa which get well without leaving behind a chronic sequel histologically gonorrhœal, consisting of discharge of filaments which contain gonococci.

During this trouble, the patient remains exposed to the acute complications (cystitis, epididymitis), and on the other hand, is often impotent, or at least suffers a certain diminution of his virule power. This impotence is, no doubt, gonorrhœa, for it ceases when by treatment filaments are made to disappear from the urine.

As other complications, there are:

1. Total sclerosis of the canal with contraction, against which dilatation is powerless.

2. Varicose veins in the deep urethra. The latter are observed chiefly in gouty subjects.

Instillations are the true treatment for this chronic gonorrhœa. They ought to be numerous (20 to 30 in all, made every other day). They ought to be varied (nitrate of silver, creoline, resorcin), because each substance quickly loses its effect. They ought to be progressively increased in strength (nitrate of silver, from 1 50 to 1-20; corrosive sublimate from 1 1000 to 1-100; creolin from 1-100 to 1-10; etc.)

Finally, it is well to syringe the urethra with natural mineral waters.—*La France Med.*

Tamponing the Uterus in Post-Partum Hæmorrhage.

Auvard, of Paris: Tamponing the uterus and vagina in cases of post-partum hæmorrhage was praised by Duhrssen in 1887. It has also rendered good service to me.

Our German colleague has collected 65 cases. Since then I have applied the remedy in 2 cases. This makes a total of 67 cases. Of this number 6 died (1 of eclampsia, 1 of tuberculosis, 1 of septicæmia, and 3 of anæmia and syncope).

The first 2 can not be counted against tamponing. There remain, therefore, 4 cases. Thus we see that the method gives a mortality of about 6%.

According to my notion, tamponing of uterus and vagina by iodoform gauze, is a powerful hæmostatic which ought to be adopted universally in obstetrical practice. It offers no real dangers. Before the gauze is inserted, the uterus should be emptied of its contents.—*La France Med.*

Laws Governing the Transmission of the Whispering Voice in Pleural Effusion.

G. Rummo, of Pisa: Bacelli has fonnd that words

pronounced in a whisper by patients having pleuritic effusions, are on auscultation heard with various modifications. Thus the consonants become more and more lost in proportion as the effusion is more heterogenous and contains corpuscles (either purulent or hæmorrhagic).

If, on the other hand, the whispered words are heard as if they were whispered into the ear, all the syllables being well articulated, then the effused fluid is sero-fibrinous and homogeneous.

My own conclusions, based on experiments and on clinical observations are as follows:

1. The quantity of the effused liquid, the anatomical condition of the pulmonary parenchyma and bronchi, the intra-pleural pressure, the tension of the plural sac and of the chest walls, the quality of the new formed membranes lining the pleura; all these factors of secondary importance, are able, exceptionally and under certain circumstances, to hinder or favor the manifestation of Bacelli's sign.

2. But the law which regulates the transmission of the whispering voice through a pleuritic effusion, rests mainly on the homogeneous or heterogeneous nature of the effused liquid. It has a definite relation, on the one hand, to the number of globules (per cubic millimeter of the fluid), and on the other hand, to the physical, chemical and histological modifications of the cellular elements of the fluid.—*La France Med.*

[TO BE CONTINUED.]

I HEAR an amusing story about Gen. Sherman, says a New York *Star* writer. A few weeks ago the General gave an order to a well-known gentlemen's furnisher in Washington for a dozen shirts. In due time the shirts were delivered, and a check for the amount was received by the shirt-maker. A few days later General Sherman was walking arm-in-arm with a gentleman down Pennsylvania avenue. Presently the shirt man bowed. The General remembered having seen the man before, but being at a loss to place him said: "Ah, sir, you have the advantage of me." The shirtmaker noticed the General's embarrassment, and by way of introducing himself, said, at the same time pointing to himself, "Made your shirts, sir: made your shirts."

"Oh, yes. I remember now. I haven't seen you in years," said General Sherman. "How have you been, Major? Glad to see you." Then, turning to his friend on his arm, he said: "Col. Wood, allow me to introduce to you my friend, Maj. Schurtz. Major Schurtz, Col. Wood."

DR. HENRY E. WAITE, whose electric appliances have recently interested physicians visiting the exposition, gives it as his unbiassed opinion that the Axo cell will prove the most serviceable and the most durable, in the long run, of all cells now in use.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

Communications relating to subscriptions and advertisements should be addressed to J. H. CHAMBERS, 914 Locust Street.

Original Articles, Reports of Cases, Correspondence, etc., relating interesting medical topics, are cordially invited.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, OCTOBER 18, 1890.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

The meeting held at Louisville was well attended, and the number of papers as large as usual; so numerous were they, in fact, that it was found impossible to allow time for their discussion. A motion was put having the object of dividing the Association in two sections, Medical and Surgical, but, like a similar attempt of last year it was voted down.

As is usual with this Association, the social features were of the most attractive and enjoyable sort; receptions, excursions, banquets, etc., followed each other in quick succession, and Louisville hospitality was unbounded.

The address of Dr. Wyeth entitled, "The Medical Student", which will be given in abstract in the REVIEW, evoked an immense amount of interest, and the hall in which it was delivered, though having a seating capacity of 400, proved too small for the great number who attended.

The register showed that 167 members of the Association were in attendance on the convention.

The display of instruments and pharmaceutical preparations was large and interesting. Most of these were shipped to Chattanooga to be shown to the Tri-State Association, which convened there on Tuseday, October 14.

We present, with this number of the REVIEW, the first of a series of papers and abstracts of papers that were read before the Mississippi Valley Association.

The Committee on nominations reported the following names far officers for next year, in which it will be noted that St Louis gets the lion's share of honors conferred:

President.—Dr. C. H. Hughes, St. Louis.

First Vice-President.—Dr. J. H. Hollister, Chicago.

Second Vice-President.—Dr. S. S. Thorn, Toledo.

Secretary.—Dr. E. S. McKee, Cincinnati.

Treasurer.—Dr. C. F. McGahan, Chattanooga.

Chairman Committee of Arrangements.—Dr. I. N. Love, St. Louis.

Judicial Council.—Dr. Murdock, of Pennsylvania; Dr. H. H. Mudd, of St. Louis; Dr. D. N. Griffiths, Springfield, Ill.; Dr. A. W. Owen, Indiana; Dr. Xenophon Scott, Ohio; Dr. Walker, Detroit; Dr. D. S. Reynolds, Louisville.

The Nominating Committee also reported in favor of holding the next convention in St. Louis, on the third Wednesday in October, 1891.

Missouri Medical College Semi-Centennial Celebration.

The enthusiasm displayed at the meeting of the Alumni Association of this institution on October 9, portends the emphatic success that must crown the efforts of those who are working with the object of arranging for the celebration of its fiftieth anniversary in an appropriate manner next March.

Upwards of 125 graduates were present, many from out of the city, and a large batch of letters was shown evidencing the great interest taken in the movement by the numerous family of the Alma Mater, disseminated throughout the country. Most of the faculty of the college were present, and the warmth of their support was manifested in the ringing speeches which they delivered, and the frequent and enthusiastic applause with which they were met.

Dr. Le Grand Atwood,the First Vice-President of the Association, presided and opened the meeting with an eloquent but brief address, in which interesting reminis cences connected with the founding of the college figured; this was followed by speeches of a like character by Dr. Wm. M. McPheeters; by Professor C. O. Curtman who spoke of the reorganization of the Faculty in 1865; by Professor Tuholske, who, in connection with the topic of the compulsory three-year's course of lectures, recently inaugurated by the Faculty, alluded to the fact that Missouri was behind her sister states in enforcing a three years attendance at college, and charged the Alumni, both present and absent, with the duty of using whatever of ability lay in their power to so influence their representatives that the legislature could not refuse the enactment of laws to attain that end. Dr. James Gamble, of Leclaire, Io., Dr. A. B. Barbee (class of 43), Professors Prewitt, Robinson, Bauduy, and Dr. A. S. Norwine, of Bismarck, Mo., all declared their desire to give their hearty support to the contemplated celebration.

The names of a number of gentlemen were recommended by the committee as vice-presidents, and were unanimously elected.

After some delightful music by a mandolin-guitar club and the serving of refreshment, the association adjourned to meet again on Monday October 20, when it will convene for the purpose of electing executive committees to inaugurate the more practical work of the celebration movement.

The Treatment of Certain Sprains.

Dr. D. Hayes Agnew, in the *University Med. Magazine*, calls attention to certain cases of persistent lameness which have been ascribed to sprains of the ankle, and treated as such with but temporary benefit. The lameness returns on the patient's resuming exercise.

In these cases the trouble is not in the ankle joint, but in the sheath of the tendon of the perineus longus muscle. This will be easily evidenced by pressure along the course of the tendon between the external malleolus and the base of the metatarsal bone of the little toe. There is little, if any, swelling; pain will also be experienced on forcibly adducting the foot. The differentiation from ankle sprain is comparatively easy, for here there is diffuse swelling about the joint, especially in front, and usually severe pain on flexing and extending the foot. Where the tendon and its synovial membrane are involved, a Dupuytren splint should be applied on the outer side, fixing the ankle and holding the foot in an abducted position. The tendon is thus relaxed and pressure is taken from its canal. With rest and anodyne applications the inflammatory trouble will subside in a week or ten days. The patient must not now be allowed to walk around in an ordinary shoe, for the tendon being one of the supports of the foot, is not in a condition to endure functional pressure. A number of plies of leather are to be applied on the outer side of the sole of the shoe, gradually thinning off toward the inner side of the foot, and relieve the tendon from pressure. Such a shoe should be worn for some time, and only restored to its original form by gradually removing one layer of leather at a time from the sole. In order to obtain good results this treatment should occupy several months.

Bleeding in Lead Poisoning.

Bleeding in lead poisoning is a comparatively new and little practised treatment, but the results obtained from it by Dr. W. E. Hughes (*University Medical Magazine*), in the Philadelphia Hospital, have been so satisfactory as to cause it to merit further and more extended trials. In the cases in which Dr. Hughes employed it, he abstracted from twelve to twenty ounces of blood, improvement being apparent in some cases within a few hours. In one case it was necessary to repeat the bleeding after two weeks, constipation and headache still continuing. The paralysis of the extensors was usually improved within several

hours. Where the disease was of long standing and the patients cachectic, the benefit of the treatment was not so quickly apparent. The cachexia is not improved, and requires after-treatment. Though the cases treated were few in number, the results were much more satisfactory than those likely to be obtained by any other method of treatment.

Dr. Hughes ascribes the relief to two causes: "First, to a relief of focal congestion in the cord or nerves; second, to a change in the blood tension, facilitating the rapid elimination of the lead." There was probably no organic lesion of the nervous system present in any of the cases. No observations were taken upon the lead in the blood, nor on the elimination of the blood after bleeding.

The Uses of Glycerin.

In an interesting paper in the *Therap. Monatsh.* (*Deutsch. Med. Zeit.*), Dr. C. Weber, of Metz, reviews the various uses to which glycerin has been put and details some experiments tried in the effort to increase its field of usefulness. He refers to the fact now pretty well known, that glycerin given per enema quickly produces an evacuation, and also to the fact, not so well known, that it is an excellent purgative when given by the mouth in doses of about a drachm.

The use of glycerin in gynæcology by Sims drew attention to its remarkable hygroscopic powers; and it is not necessary to do more than refer to the rapid decrease in size of an acutely swollen cervix under the influence of a glycerin tampon. This action led Weber to use glycerin paintings in endeavoring to reduce inflamed and swollen mucous membranes elsewhere. In diphtheria and croup these proved unsuccessful, for the loosening and throwing off of the diseased patches seemed hindered and delayed by it. On the other hand, in cases of acute coryza free painting with glycerin gave surprisingly good results. This method of using it also proves an excellent palliative in chronic hypertrophic rhinitis; it aids the crusts in softening, and depletes the hyperæmic mucous membrane. It might also be well to give glycerin a trial in ozæna, in the hope that by its action it would stimulate the atrophic mucous membrane to energetic secretion. The oily consistency of glycerin, together with its affinity for water, render it more useful than oil in lubricating vaginal specula, catheters, sounds and other instruments, as well as the exploring finger.

Phenacetin in Rheumatism.

Since Collischonn first drew attention to the use of phenacetin in rheumatism, the drug has been given more extended use, and has, we believe, given quite general satisfaction. In the *Bull. de Therap.* (*Med. Chir. Rundschau*) reports a number of cases in which he has used phenacetin, and sums up his results. His doses are considerably larger than those recommended by Collischonn, who gives 15 grains four times daily. In acute articular rheumatism Rifat begins with a gram (15 grains) three times daily, and increases by 15 grains on each succeeding day until he notices an effect in a lessening of the pain and increased mobility of the joint. This result was generally apparent by the time the dose reached 6 grams (90 grains) daily. In exceptional cases, however, it was necessary to give 8 grams per day. These large doses were continued for at least three days, or at most for a week, and were then gradually reduced to three grams daily, which last dose was continued for about a week. The treatment required 17 days in moderately severe cases, 21 days in severe ones, a pleasant contrast to to the average of 35 days in treating with salicylic acid, and 25 with antipyrin medication. In twelve cases treated after the above method no cardiac complication could be found, and on following this line of treatment relapses are very rare. According to Rifat, the danger of poisoning is very slight. Large doses are exceptionally well borne by the stomach. One effect usually observed is profuse sweating, which decreases as the patient improves, despite the continued use of the drug, and disappears as the temperature becomes normal. Cyanosis seldom occurs. Rifat noticed it in but one case of typhoid fever, and in none of the rheumatic cases. Uræmic symptoms set in in one case of articular rheumatism; the patient was a woman, æt. 65 years, and had arteriosclerosis. On the fourth day of treatment, when the dose of antipyrin had reached 5 grams, and the patient's condition had perceptibly improved, there suddenly appeared vomiting, extreme dyspnœa, great mental perturbation, and almost total suppression of urine. There was no cyanosis or sweating. These symptoms, however, quickly disappeared on the administration of a purgative and caffeine. The case would indicate a cautious use of the remedy where arterio-sclerosis exists.

The results were no less favorable in three cases of articular rheumatism of gonorrhœal origin, in which sodium salicylate, potassium iodide, and antipyrin had all been used in vain.

A New Method for Controlling Epistaxis.

In a recent issue of the Review we noted a simple way of relieving nasal hæmorrhage which did away with the necessity for a Bellocq's sound and substituted therefor thin rubber tubing. A still simpler method is one devised by Dr. W. W. Parker, of Richmond, Va., which he describes in the *Medical Record.* He takes fifteen of the long threads of patent lint, or if this is not at hand, of the largest size spool cotton, three and one-half or four inches long, which he ties in the middle, and doubles on themselves, allowing one end of the string to be six or eight inches long, so that the plug can be pulled out when necessary. A probe or long piece

of thin pine the size of a match is pressed up against the knot and passed back along the floor of the nasal cavity until the posterior nares are reached, which will be known by the resistance and the depth to which the probe has entered. The probe is carefully withdrawn and the anterior nares plugged. The doctor states that the ends of thread floating in the blood at once coagulate it, and that the passage of the soft lint gives no pain whatever. The plug is removed in from twenty-four to forty-eight hours.

This plan would seem to have the advantages over the others that the doctor claims for it, viz.: the ease, simplicity, and painlessness of application, and the fact that it can be used in the smallest patients. It is also stated that the discomfort while the plug remains is very much less than in the other methods.

MEDICAL ITEMS.

Plenckii's Solution for cauterizing condylomata: Hydrarg. chlor. corros., aluminis, cerussæ, camphoræ, alcohol, aceti vini, equal parts.

A Midwife Who Practised Surgery.—A Vienna midwife was recently sentenced to three month's imprisonment for having divided the frænum of the tongue in a newborn infant, with the result that it died of diffuse suppuration of the sublingual connective tissue.

It is said that 15,000 bottles of Champagne were disposed of by the members attending the International Congress.

It is probable that no 'ringing resolutions' advocating prohibition were introduced at *this* convention, at least.

Use of Iodides in Infantile Scrofulosis.—According to the *Medical News*, tincture of iodine may be administered to very young infants in the dose of a drop a day diluted with a small quantity of barley-water or milk. Besnier uses iodoform in minute doses for the same purpose in infants.

The Proceedings of the Berlin Congress.—The proceedings of the recent Berlin Congress, which include more than 200 addresses and discussions, will be published in full in a large work, which will appear in separate parts. It is expected that the first part will be ready in the course of the autumn.

Prizes for Essays on Vivisection.—The American Humane Society offers two prizes, each of $250, for the best essays on the question whether vivisection should be permitted in the interests of humanity, and, if so, with what restrictions. Essays should be sent to George T. Angell, No. 19 Milk Street, Boston, before January 1.

Honor to Sir Joseph Lister.—The Cameron prize in therapeutics of the Edinburgh University has been awarded to Sir Joseph Lister for his development of the antiseptic system of surgery. Mr. Lister will deliver an address before the University during the approaching session, in which he will sum up the results of his labors in recent years.

Hypnotism in Russia.—The medical department of the Russian Ministry of the Interior has decreed that, "considering the evils resulting from a public display of hypnotism, public *seances* of hypnotism and 'magnetism' are forbidden," and that the "application of the method for therapeutic purposes is to be permitted only in the presence of several physicians."

Camphor a Solvent for Iodoform.—The *Medical and Surgical Reporter* says that camphor increases the solubility of iodoform in alcohol and ether. While one hundred parts of alcohol ordinarily dissolve not more than one and one-fourth parts of iodoform, the same amount of a saturated solution of camphor is capable of taking up as much as ten parts.

A Famine Duel.—Jacques, the professional hunger virtuoso of Paris, has sent a challenge to Succi, the famine debauche of Italy, to the following effect: "I Alexandre Jacques, having been informed that Signor Succi intends attempting a 46 days' fast in New York, do hereby challenge him once more to fast for endurance under equal conditions. I, the child of France, defy the blatant Italian, Succi. Accept my challenge and starve with me, or be known for evermore as a braggart sailing under false colors.—Alexandre Jacques."

Bromine as a Disinfectant.—Bromine as a disinfectant is said to be coming to the front. It is an inexpensive by-product of the manufacture of salt, selling at 70 cents a pound, and in solutions containing one part in weight to about eight-hundred of water, it may be used freely without affecting anything which it may touch. A few gallons used daily will remove all ammoniacal odors from stables, or a few quarts will thoroughly deodorize the entire plumbing system of an ordinary house. The undiluted bromine is strongly corrosive, aud if it touches the skin causes a painful burn.—*Pacific Med. Rec.*

Syphilitic Infection from a Bite.—A patient was recently shown to the Berlin Medical Society who was said to have contracted syphilis from the bite of a man. The bite was inflicted on the lip, and the wound healed in two or three days; but in six weeks it reopened and the lip became greatly swollen. Five weeks later there was an ulcer on the inner surface of the lip with great swelling and induration round about; the submaxillary and cervical glands were also much enlarged. After some time a typical syphilitic eruption made its appearance. By the use of mercurial frictions the swelling

both of the lips and of the glands was considerably reduced.—*Br. Med. Jour.*

Mr. Hutchinson on Circumcision.—In the *Archives of Surgery* Mr. Jonathan Hutchinson sums up his experience in regard to the sanitary advantages of the rite of circumcision. After premising that it is not needful to go on a search for any recondite motive for the origin of the practice, he says: "No one who has seen the superior cleanliness of a Hebrew penis can have avoided a very strong impression in favor of the removal of the foreskin. If not removed it constitutes a harbor for filth, and is, in many persons, a constant source of irritotion. It conduces to masturbation and adds to the difficulties of sexual continence. It increases the risk of syphilis in early life and of cancer in the aged. I have never seen cancer of the penis in a Jew, and chancres are rare."

The Eyes of Eye Surgeons.—At the dinner of the Ophthalmological Section of the International Medical Congress at Berlin, Professor Hermann Cohn, of Breslau, showed a collection of autographs of the oculists who had taken part in the annual meetings at Heidelberg for 20 years, which was made specially interesting by the fact that opposite each name the signatory's visual power with the right and left eye respectively was indicated. Among other celebrities who figured in this list were Arlt. Horner, the elder Critchett, Schweigger and Knapp. Among 44 oculists tested, visual acuity was normal in 32, over the normal in 10, and under it in 2. Twenty-eight, or 61%, were short sighted; the concave glasses required varied between Nos. 5 and 24, the average being 20, so that the myopia of the distin guished ophthalmologists in question was, as a rule, moderate in degree.

Treatment of Burns.—At the hospital Friedrichshain, of Berlin, there is employed in cases of burns a dry dressing, which, according to Dr. Karl Bardeleben, gives "surprising" results.

The affected part is first carefully washed with carbolized water, two and one-half to three per cent, or else with a three per cent solution of salicylic acid. The blisters then having been opened, the entire surface is dusted with finely pulverized sub-nitrate of bismuth, after which the parts are covered with absorbent cotton, which is renewed as often as it becomes impregnated with the secretions of the wound.

If the burn is very extensive, we may replace the powdered bismuth with a pomade of the same.

Dr. Bardeleben declares that with this dressing cicatrization is much more rapid, and the pain is more quickly relieved than with all other forms of treatment. And, an observation of importance, notwithstanding the large quantity of bismuth employed, there have never been observed any symptoms of intoxication.—*Times and Register.*

SOCIETY NEWS.

SOUTHERN SURGICAL AND GYNÆCOLOGICAL ASSOCIATION.

The preliminary programme of the meeting of this association to be held at Atlanta, Georgia, November 11 to 13, is out, giving a very attractive list of thirty papers already promised for that occasion.

ROLLA DISTRICT MEDICAL SOCIETY.

The Thirty-fourth Semi-Annual Meeting of the Rolla District Medical Society will be held in Rolla, Mo., on Thursday and Friday, October 23 and 24, 1890.

Sam'l B. Rowe, Corresponding Secretary. W. M. Lenox, President.

CENTRAL ILLINOIS DISTRICT MEDICAL SOCIETY.

The Fifteenth Semi-Annual Meeting of the District Medical Society, of Central Illinois, will be held at Decatur, Tuesday, October 28, 1890.

Programme.

REPORTS OF COMMITTEES:

Surgery, Geo. N. Kreider, M.D., Chairman, Springfield.

Some Notes on Hodgen's Splint, W. J. Chenoworth, M.D., Decatur.

The Essential Oils in Surgery, C. E. Black, M.D., Jacksonville.

Some Surgical Cases, W. M. Harsha, M.D., 58 State St., Chicago.

Obstetrics, L. P. Walbridge, M.D., Decatur.

Premature Expulsion of the Ovum.

Essays.

Puerperal Eclampsia; Report of a Case, F. B. Haller, M.D., Vandalia.

Cervical Laceration, L. A. Malone, M.D., Jacksonville.

Neurasthenia Feminens, A Fashionable Cause, Amos Sawyer, M.D., Hillsboro.

Alcoholism and Insanity, Frank P. Norbury, M.D., Jacksonville.

Successful Splenectomy.—On July 13, in the clinic of the Hospital of St. Orsola, at Bologna, Prof. Tizzoni, in the presence of several physicians and students removed a very much enlarged and ectopic spleen due to malarial infection. The *Raccoglitore Medico*, July 30, 1890, reports that on the tenth day the dressing was removed and the wound was found perfectly cicatrized. The organ, when removed, weighed over 2 pounds and measured 11 inches in length.—*Med. and Surg. Rep.*

SELECTIONS.

THE TREATMENT OF THE SEPTIC ACCIDENTS OF THE PUERPERAL STATE.

In summing up the conclusions from an exhaustive paper on this subject in the *Therapeutic Gazette*, Dr. E. P. Hurd, says:

The diagnosis of septicæmia having been made, the leading indications are:

1. To prevent any further absorption of poison by the lymphatics and veins of the genital passages.

2. To relieve pain, nervous perturbation, and shock.

3. To aid the natural forces in the contest with the enemy.

4. To combat fever, and meet other symptoms and complications that may arise.

When the disease is declared, douches and ablutions cannot, of course, do the good that is expected of them in simple sapræmia, and may not be needed at all. If, however, there is any fetor in the discharges, and any reason to believe that the uterus and vagina are still the breeding places of septic organisms, the irrigations should still be practiced twice a day. A vaginal injection is always harmless, and if the lochia are suppressed, the hot douche may favor their return. Intrauterine douches may do serious harm, and should not be resorted to unless there is decomposing *debris* to be removed. All danger may be avoided by using (as Dr. T. G. Thomas advises) a large injecting-tube, which cannot enter an open-mouthed sinus (and, I may add, that, if there be no orifice on the end of the tube, and the fluid be made to issue from minute orifices on the sides, all the better); by using water warmed to 105° F.; by injecting the fluid through the tube so as to exclude air before passing this up to the os uteri; and by making the injection cautiously and with great gentleness. The os uteri ought to be patulous, so as to allow the injected fluid speedily to flow back; in the event of its being contracted and closely hugging the canula, it should previously be dilated by some mechanical means. A fountain syringe, which gives a continuous stream, is preferable to a Davidson syringe.

Cases of pyæmia and septicæmia, says Matthews Duncan, are to be managed rather than treated. We cannot arrest or even moderate the storm, but we may guide the bark through it.

An important indication is to relieve pain and nervous disturbance. For this object there is notning better than a hypodermic injection of morphine. The $\frac{1}{8}$ grain tablet triturates of the manfacturing pharmacists are convenient for this purpose; or Magendie's solution may be used, which contains 16 grains sulphate morphine to an ounce of distilled water—10 drops of this solution is enough for an injection in ordinary cases. The hypodermic may have to be repeated twice or three times a day. Where there is a complication of peritonitis, the pain is a formidable symptom, and must be kept in abeyance by frequent large doses of opium. My own custom has been to begin with a subcutaneous morphine injection, and to keep up the effect by grain doses of solid opium given by mouth. I have seen cases where 2 grains every hour were barely sufficient to control the pain, but quantities much larger than this have been given with impunity.[1]

In the pyæmic variety there is rarely severe pain, and opiates are of little use, and may often be omitted altogether.

The third indication is to aid the natural forces in the contest with the enemy.

The puerperal fever patient is a person whose constitutional powers have been impaired by various causes which have rendered her susceptible to septic agencies. She is, moreover, still further depressed by the multiplying virus in her system, and an "antiphlogistic" or spoliative treatment would be eminently improper. While blood-letting is not to be thought of, active purging, with a view to elimination, is not justifiable. It is only where there is constipation and fæcal accumulation that purgatives are required, and then mild laxatives should be chosen,—cascara sagrada, castor oil and calomel (an ounce of the former to five grains of the latter, rubbed up with twenty grains of bicarbonate of sodium.)[2] The recurrence of diarrhœa (whether accidental or provoked), where there is peritoneal inflammation, is injurious rather than salutary, and is not to be encouraged. Milk, beef tea, beef peptones, wine, and other alcoholic stimulants are to be regularly administered. Quinine in pretty large doses is believed to promote tone and arrest destructive metamorphosis; these large doses are also needed for antipyretic effect. The tincture of chloride of iron has considerable reputation as an internal antiseptic; it is much given in diphtheria, erysipelas, and surgical septicæmia, and seems to be especially valuable in purulent infection. The larger the dose that can be borne the better; 20 drops every two hours freely diluted; with five grains of quinine in capsule, would not be overdosing in malignant septicæmia. In the case above reported this quantity (one drachm quiniæ sulph., four fluiddrachms tinctura ferri chloridi, in divided doses daily) was borne for many days and the attending physician was inclined to impute the recovery of the patient largely to this medication.

But, unfortunately, many patients cannot take these doses, nor will the irritable stomach bear the nourishment that is required. The physician may be compelled to resort to ice, iced champagne, bismuth, and hydrocyanic acid to allay vomiting, and the patient must be fed with liquid nourishment by the teaspoonful every few minutes till such time as the rebellious stomach will accept more food.

Febrile symptoms are best met by antipyrin in 10-grain

[1]Thus, a patient of Professor Alonzo Clark took the equivalent of nine hundred and thirty-four grains of opium in four days; and one of Lusk's, at the Maternity, the equivalent of over seventeen hundred grains of opium in seven days (Lusk's "Midwifery," p. 645).

[2]Fordyce Barker.

doses every two hours, or by acetanilid or phenacetin in 5 grain doses till the temperature falls to some point near the normal. Quinine, in the same dose, may be the preferable antipyretic, especially when there are chills and sweating, announcing the presence of pus. Thomas advises to give 15 grains of quinine night and morning, or salicylate of sodium in full doses.

Abscesses are to be freely opened, and if necessary to give vent to matter, one or more drainage-tubes should be inserted.

In cases of peritonitis, flannels wrung out of hot water, turpentine stupes, or linseed poultices, are always useful.

Puerperal mastitis and phlegmasia alba dolens are to be treated on general principles.

ABSCESS OF THE BREAST.

These abscesses of the mammary gland are among the most painful and distressing infirmities incident to maternity. They have been the subject of study by the most simple as well as the most learned exponents of the healing art. Sometimes they recur so rapidly that the doctor gives up hope of doing anything for their cure, and stands back and gives the old women and nurses full opportunity to employ their empirical resources. Skins of black cats freshly killed, and poultices of lamb's brains, are samples of the remedies which have been handed down by tradition from the remotest time in these cases. I might fill pages with the mere enumeration of the sundry and divers things which have been invoked to relieve the pain and cure the broken breast.

Here is a young woman with a baby three weeks old, and she has tried faithfully to nurse it, but without success. She comes to my clinic because her breast has steadily enlarged since she began having pain in it, and nothing she, her friends, or her physician could do for it has done any good.

It is the left breast. It is twice as large as the right one, which is supplying the baby with milk. It is reddish purple all around the nipple, which is deeply retracted into the substance of the gland. It feels hard and unyielding, and is very painful under pressure. She has tried to empty it with the breast pump, and has caused herself great pain thereby. She tells us there is no matter in it; that the doctor lanced it three days ago, but drew nothing but blood. She has had chills for the last week every day; sweats profusely; has a temperature of 102° F., and is very weak. We must not make any mistakes now. The chills, fever, history, and looks of the breast say there ought to be plenty of pus in it now. I can feel the deep fluctuation, which, with the facts just related, assures me that a deep and free incisio will evaeuate an abundance of pus. The cut can be made so quick that there is no need of an anæsthetic. Now the pus flows from the wound, and she feels better already. There is fully a pint of it. Now it flows again as I pull from the wound the fibrinous shreds which plug it. There is a good handful of them which have macerated off from the abscess walls, and which must be removed or the healing will be greatly prolonged. One reason why the mammary abscess is so apt to recur is, that the cut is not always made free enough to let the flakes of organized lymph which develop escape; they remain behind and fester, stirring up inflammation and pain until fluctuation is felt, when the knife is again used before the patient is well.

How will we treat the abscess and the patient now that it has been freely opened? We will order hop tea, a teacupful to be drank once in three hours as a gentle soothing tonic. We will wash the cavity perfectly clean with warm water, then we will inject it with: Impalpable powder of boric acid, grains xx; iodoform, grains v; suspended in one ounce of warm water.

This is all that the case will need. Leave the wound open; the water will drain out leaving the boracic acid and iodoform in thorough contact with the abscess walls.

I have never had a relapse of mammary abscess since I began to treat them by:

1. Free incision.
2. Removal of plugs of lymph.
3. Washing with warm water.
4. Injection of powdered boracic acid, iodoform and hot water.

The patient must begin to let the baby nurse just as soon as freedom from pain will permit. The function of the gland will be perfectly restored.—Hal C. Wyman, M.S., M D., in *Med. Age.*

ABORTIVE TREATMENT OF GONORRHŒA.

Two papers were read upon this subject at the Society of Practical Medicine in Paris on the 13th of February, 1890 (*Journal of Cutaneous and Genito-Urinary Diseases*, June 1890).

In that by Dr. Malecot the treatment by injections of nitrate of silver was discussed. He regards the prejudice against the employment of silver as unfounded, if it is properly applied. Certainly the strong solutions are dangerous, especially if they are used several days in succession. They may provoke discharge of blood, and their too energetic action may compromise the subsequent elasticity of the canal. Furthermore, with the piston syringe the sphincter may be forced and the caustic be uselessly injected into the bladder. He therefore recommends the olive bulb instillator, which is introduced as far as the muscular sphincter. The sensation of special resistance here felt serves as an indication that the instrument has gone far enough.

The patient first urinates, then the canal is to be washed out with a feeble boric acid solution, and then the instillation made, the first day in strength of 1 to 50, and the following days 1 to 100 or 1 to 150, the so-

lution being retained in the urethra for two or three minutes. The irritant action is only of short duration, and affects only the epithelial layer of the mucous membrane. In the intervals between the acts of urination it is recommended to wash out the urethra with some antiseptic solution,—the permanganate of potassium, resorcin, or bichloride, the latter not stronger than 1 to 10,000 or 1 to 20,000.

Dr. Malecot has obtained excellent results from the salicylate of mercury, in strength of 5 centigrammes to 100 grammes of water, at a temperature of 30° to 40°C. It is a strong antiseptic without being painful. Internal treatment is not wholly neglected, sandal oil, copaiba, etc., being given in the belief that they undergo a change in the economy by means of which they become germicidal. Oppenheimer has shown that urine passed after the administration of 30 grains of copabia sterilized silk threads charged with microbes. He has also followed Dreyfaus in the employment of salol, in daily doses of 6 grammes, with the same object in view.

Following out this plan, an abortion of a recent gonorrhœa often takes place, and without danger. Only violent inflammation of the urethra should cause one to suspend the treatment. In some cases, without known cause, the method fails.

In the second paper, by Dr. Picard (*Journal de Med. de Paris*, March 9, 1890), the questions as to the efficacy and harmlessness of abortive injections of the nitrate of silver are answered in the affirmative. If we examine into the action of a sufficiently concentrated solution of nitrate of silver we see that it acts upon the mucous membrane of the urethra just as the gonorrhœal virus acts, causing death and desquamation of the superficial epithelium. The difference between their actions and that which explains the efficacy of the treatment is the rapidity with which the silver works, destroying the epithelium at once, while the virus requires several days to effect the same result. The success of the treatment, therefore, depends upon the promptness of its application. It should be made when the first symptoms appear,—that is to say, before the appearance of pus. In practice it is at the time that the patient feels an itching sensation in the fossa navicularis, and perhaps notices a clear drop at the meatus, that the treatment must be instituted. A red meatus, with the lips swollen and everted, turgidity of the glans, and great pain furnish contraindications to the employment of the abortive method. If these parts are normal and the pus is not too abundant and thick, the silver may still be used. The solution he recommends is that of 1 in 25 or 1 in 30. More concentrated it becomes caustic, and the solid stick is not to be thought of, because it would leave a cicatricial stricture. The Langlebert syringe, throwing a recurrent stream, is recommended, but the author gives preference to the ordinary injection syringe. The pain occasioned is usually moderate, Twenty-four or thirty-six hours after the first injection, if the discharge persists, a second is authorized, provided the parts are neither red or painful.—*Ther. Gazette.*

THE RELIEF OF HOARSENESS.

Sajou considers hoarseness presents three forms, viz.: 1. Depending on simple dryness of the larynx, and especially of the vocal cords, such as is observed in singers, excessive consumers of tobacco, and those accustomed to extended sojourns in smoke, dust, soot, etc. 2. Of inflammatory origin, arising, perhaps, from catarrhal conditions of the respiratory passages. 3. Where the voice is weakened or altered by reason of lack of muscular tone, or by genuine paresis.

The subjective symptoms of the first form are, a sensation of dryness and constriction which provokes hacking and characteristic "hems." During prolonged vocalization, especially when singing, the voice without being absolutely altered appears slightly harsh or husky, and the patient readily becomes fatigued, when a tickling sensation supervenes that ultimately induces coughing.

Here relief may be obtained by means of warm sprays, repeated every two hours, of such solutions as ammonium muriate, potassium chloride, etc. When any vocal exertion is to be made, the last spraying should be had three hours previously, while during the interval a compressed tablet of potassium or ammonium muriate may advantageously be allowed to dissolve in the mouth.

In inflammatory conditions of the throat, especially if there is a primary laryngitis, rest is imperatively demanded for the vocal organs. At the same time attention should be given to regulation of digestion and intestinal functions, since it often happens, especially in females, that hoarseness is influenced by constipation. Any naso-pharyngeal trouble of course demands local treatment; turgescence of the erectile tissue of the turbinated bones may be relieved by the application of cocaine, followed by insufflation of some sedative powder, such as, for instance, acetate of morphine, grammes 0.03, and subcarbonate of bismuth and talc, each, grammes 0.25, made up into five powders, one of which constitutes a dose. Such insufflations may be repeated every four hours, care being taken that the powder reaches the walls of the pharynx. If there is a febrile condition, great relief may oftentimes be experienced by the internal administration hourly, in minim doses, of aconite tincture. But if the trouble is only an exacerbation of a chronic rhinitis, a spray of sodium bicarbonate will usually meet all indications. An attack of coryza of several days duration will necessitate more energetic treatment, such as application by the Galvano-cautery (on one side only) of the most prominent part of the turbinated bones.

The best treatment of the exacerbations of chronic pharyngitis, whether simple or glandular, is frequent painting with a 6% solution of silver nitrate; or, perhaps, light application of the Galvano-cautery, care being taken not to touch more than three or four of the inflamed and painful follicles at a sitting; the counter irritation thus induced often clears the voice in a re-

markable manner, and so that one can speak comfortably on the evening of the same day. To act on the larynx itself, a spray of resorcin (1 or 2% solution) often proves satisfactory. When the hoarseness, however, still proves resistant and stubborn, resort must be had to intra-laryngeal applications, such as the perchloride of iron (2% solution).

It is sometimes a simple and easy matter to abort recent cases, if taken at their very outset, by laryngeal insufflations, every two or three hours, of the morphine-bismuth-talc powder, but it must not be forgotten, in the case of public singers, that morphine induces torpor of the vocal cords, and for this reason, a considerable interval should be allowed to elapse between the insufflation and the hour when special vocal exertion is to be made.

In hoarseness arising from muscular weakness or from paresis (most frequent in women), the voice may be normal in speaking, and altered only when singing, especially in attempts to strike the high notes. Here Faradization of larynx is apt to be most beneficial, with which may be associated the internal administration of potassium iodide, Fowler's solution, quinine, strychnine, etc.; wine of cocoa, too, is often a valuable adjuvant to this medication.—Ed. *Med. Age.*

PILOCARPINE IN CHRONIC ARTICULAR RHEUMATISM.

The therapeutics of rheumatics is bounded by narrow lines; for while in acute rheumatism in salicylate of sodium, antipyrin, salol, and phenacetin we have remedies any one of which is in many cases worthy of commendation, and enables us to treat the disease quite as satisfactorily as is the case in malaria or syphilis, in the chronic form but little may be expected from them.

Massage, from which, upon its first introduction, so much was expected, has likewise not yielded the promised results, since in the treatment of chronic rheumatism we have to deal not with the removal of a serous exudation, but with the treatment of connective-tissue contraction and hypertrophy, while more severe mechanical measures are contra-indicated by the fact that irritation of the joints may result in inflammation and renewed suffering. Besides, it should be remembered that the muscles, which are the seat of contracture in this affection, rather tend to tear than to stretch on forcible extension, and attempts in this direction may, therefore result in an entirely useless joint. The indications thus are, as a rule, incapable of fulfilment, though a paper by Dr. Hochhalt, in the *Internationale Klinische Rundschau* for June 8, 1890, calls attention to a measure which he claims to be of the utmost value in the treatment of such cases.

About 10 years ago, Dr. Colman Korda called attention to the use of pilocarpine in case of chronic articular rheumatism, but his statements appear to have attracted no attention, and we have met with no publication on the subject until Dr. Hochhalt published the results of his experince. Pilocarpine, as is well known, produces great increase in the secretion of the salivary and sweat glands, and leads to such increase in tissue-change that organized exudation products of inflammation are dissolved, and results of retrograde tissue metamorphosis are eliminated. As an illustration of the truth of these statements, it is only necessary to recall the value of pilocarpine in ophthalmological practice, as in cases of opacity of the vitreous humor, or in iridochoroiditis, where it is especially serviceable in removing the products of inflammation. In diseases of the internal ear and in severe types of syphilis, and in dropsy of renal origin, it has recently been recommended by Von Ziemssen and Senator.

Dr. Hochhalt describes a case of chronic articular rheumatism, which seems to show that the use of pilocarpine is capable, to a certain extent, of relieving the less intense form of connective-tissue contraction, and to a certain extent of restoring the use of an affected joint. Of course, where the joints are bound down by old contractured muscles, or where the bone itself has become affected, but little may be expected, though the very fact that in certain cases relief may follow the use of pilocarpine is to be regarded as an important addition to our therapeutic measures.—Ed. *Ther. Gaz.*

EMERGENCY ANTISEPTIC DRESSINGS.

The *Therapeutic Gazette*, commenting on the present-day antiseptic treatment of wounds, well says that it is proper to adhere to a system of operative detail and dressing, yet it often happens that in certain emergencies the surgeon is not provided with the different dressings required, and under such circumstances he has to improvise dressings from the material at hand, the use of which will often be followed by results in no way less satisfactory than those of the more elaborate method.

If the surgeon has not at hand the bichloride pellets, he can easily make a solution of the required strength with the ordinary corrosive sublimate as found in the drug store.

If catgut ligatures are not at hand, silk or linen thread may be soaked in the bichloride solution, first being thrown in boiling water for a few minutes; these may then be applied to the bleeding vessels and cut short in the wound, treated as catgut ligatures; horse-hair drains may be substituted for the rubber drainage-tubes, being first well washed and then soaked in the bichloride solution before being used.

Silk or linen sutures, which have been soaked in bichloride solution, may be used for the sutures to close the wound; and, if no prepared gauze be at hand, surgical lint or old muslin or linen which has first been soaked in boiling water, and then soaked for a few minutes in the bichloride solution, may be employed, a number of layers being used, and this may be covered by a layer of

oil-silk or waxed paper or ordinary brown paper, and the dressing may then be held in position by a muslin bandage.

If the bichloride solution is wanting, the next best substitute is water which has been boiled, and it is to be used as warm as the hands of the surgeon can bear; this may be employed to irrigate the wound, and to soak the dressings which are to be used until a more permanent dressing is obtained. No judicious surgeon would think of waiting some hours to operate upon a case of strangulated hernia because he had not antiseptic solutions or dressings at hand, for in such cases time is so important an element of safety, that he would consult the best interests of his patient by an immediate operation, taking care to see that his hands and instruments were clean, and the wound was irrigated with boiled water and dressed as above described.

Curetting for Endometritis.—Seventy-five operations have been performed by the author since 1887. The operation is particularly adapted to cases which are uncomplicated with polypi or myomata, and it may also be used in cases in which there is a certain amount of disease of the uterine adnexa. Its principal indications are hæmorrhage, leucorrhœa and pelvic and sacral pain before or during menstruation. Pain alone is not, however, a sufficient indication. In twelve cases the operation was done without an anæsthetic, but such a plan is not unusually advisable. Dilatation should precede the operation for forty-eight hours, and laminaria tents have been found very serviceable for this purpose. Before curetting, the vagina should be irrigated and the uterus drawn downward. The operation should be followed with an intra-uterine application of tincture of iodine or carbolized glycerine, if the metritis were muco-purulent in character, and by chloride of zinc if it were hæmorrhagic. For a few days subsequently the vagina should be kept tamponed with antiseptic material. No accidents followed any of the author's operations, and in many of them the pain ceased at once or soon afterward. If tubal disease is extensive, no benefit can be expected from the operation.—Bonilly —*An. Gyn. and Ped.*

Hot Enemata in Typhoid Fever.—Following the suggestion by Prof. I. T. Tchudnovsky, Dr. Theodor K. Geissler, of St. Petersburg (*Vratch* No. 22, 1890), has undertaken an experimental inquiry into the action of hot enemata on patients suffering from enteric fever. In all, five cases (males, æt. from 15 to 29 years) were selected for the purpose, each experiment lasting eight days, and being divided into two periods of an equal duration, during one of which the patients received daily (at 11 a.m.) an enema of one quart of water at 108.5° F. The essential results of the researches are as follows:

1. Hot enamata manifest a very favorable influence on the intestinal tract in typhoid fever. In cases of diarrhœa, they markedly diminish the frequency of stools and improve their quality, the fæces becoming less fluid. The injections also relieve abdominal pain, and produce a beneficial action on constipation when present.

2. Immediately after an enema, the bodily temperature, as a rule, slightly rises. When examined an hour later, the temperature proves to be the same as, or even lower than, the temperature before the enema.

3. In the long run, the injections seem to promote defervescence, or, at least, the transformation of a continuous fever into a remittent or intermittent one.

4. Immediately after an enema, the frequency of the pulse commonly somewhat decreases, to increase at the end of an hour. At the same time, the pulse becomes firmer and fuller, its dicrotism less pronounced, and the cardiac contractions more vigorous.

5. The respiration usually quickens, but becomes slower in an hour or two.

6. The blood pressure distinctly rises.

7. The daily amount of urine increases, while the specific gravity sinks.

8. The enemata are invariably perfectly well borne, the patients being rather pleased with them, and a sensation of well-being always follows. As a rule, the injection is retained by the patients from twenty to thirty minutes.—*Lond. Med. Rec.*

Operation for Bunion.—Dr. Fowler, following Peterson, of Kiel, in his operations upon tuberculosis of this joint, attacks the joint from the outside, cutting backwards between the toes, loosening the great toe sufficiently to allow turning it backward alongside the inner border of the foot; wedge-shaped pieces are then sawn from the joint surfaces of the first metatarsal and the phalanx thus exposed. The pieces removed from under the bunion are joined by the internal lateral ligament, leave a V-shaped depression, and represent from a half to two-thirds of the articulating surfaces.

The advantages claimed by Dr. Fowler for his operation are:

1. Ease of access to the diseased parts and their complete exposure.
2. The incision is through sound tissue.
3. The external lateral ligament is cut, after which the toe falls readily back into good position.
4. The exostosis is removed (Reverdin.)
5. Tenotomy of the extensor pollicis can be done through the same incision.
6. The abductor pollicis is not touched.
7. The scar is out of the way of future pressure.

The operation fulfils these essential indications so satisfactorily that it may seem superfluous to make any changes, but in studying the operation upon the cadaver it seemed to me that the incision and the loosening of the toe injured, unnecessarily, sound tissue. I accordingly made a long incision on top of the joint to the in-

side of and parallel to the tendon of the extensor pollicis, dissecting off the tissues from the inside of the joint with the periosteum elevator, till the bony surfaces were well exposed, when I found I could easily remove the V-shaped piece from the joint with the bone forceps. The toe now came back into place.

The piece removed should include more than half of the joint surface. It can be made at an angle, leaving the larger portion on the under side, which gives a broad portion to tread upon.

I have operated thus on three joints with good results.—Hunter, in *N. W. Lancet.—Times and Register.*

Treatment of Typhoid Fever.—Teissier recommends the following treatment of typhoid fever:

1. Morning and evening, a cachet of naphthol, six grains; with salicylate of bismuth.
2. Four cold enemas every twenty-four hours to induce diuresis.
3. After the evening cold enema, another containing a drachm of extract of cinchona, and 9 to 15 grains of quinine dissolved in infusion of valerian, as a tonic.
4. Lastly a regime composed of about 10 ounces of claret, milk, and a little soup.

This treatment was employed in fifteen consecutive cases, not selected, some being very severe. But one died, of suppurative nephritis, at the end of the attack. In nearly all, when antisepsis was complete, as shown by the green urine, the fever fell gradually, albuminuria disappeared, the spleen lost its abnormal volume, the tongue became remarkably moist and the saburral coating fell off. Short and speedy convalescence ensued.—*La Medicine Moderne.—Times and Reg.*

Rhus Aromatica in Enuresis.—In the *Annals of Gynæcology and Pædiatry* for May, 1890, Dr. W. M. Powell reports sixteen cases of enuresis cured in children from 2½ to 18 years of age, which had been under treatment at different times at the dispensaries but without relief. All of the cases reported were free from phimosis or preputial adhesions, and in all cure was accomplished in about one month's treatment with the fluid extract of *Rhus aromatica.*

The remedy was given usually with compound tincture of cinchona or elixir of calisaya bark, Dr. Powell recommending the following formula for young children,

℞ Ex. rhois aromat. - - - fʒiij;
Elix. aromat., - - - - fʒiss;
Aq. cinnam., - - - q.s. ad fʒiij. M.

Sig.—Half-teaspoonful, to be increased to one teaspoonful, four times a day after eating.

Much stress should be laid upon diet and general regimen. The quantity of drink should be restricted, and no fluid should be allowed after four or five o'clock in the afternoon for some time after the child is considered cured. The child should be taken up to urinate late at night, early in the morning, and, if necessary, once during the night, and should always be thoroughly awakened.

Very little meat should be allowed if the patient shows any rheumatic symptoms; indeed, children do better without it, owing to the effect it has of acidifying the urine, which irritates the bladder and provokes expulsion.

The child should be kept in the fresh air as much as possible, provided the weather be fine, and allowed to exercise, care being taken to have flannel next to the skin and the feet well protected with stout shoes. The child should be given a cool or even cold sponge-bath each morning, with a tablespoonful of sea salt added. The body should then be briskly rubbed with a moderately coarse bath-towel, especially in the region of the spine.—*Ther. Gazette.*

Young Mother.—Dr. J. B. Patton writes the *Med. World* as follows:

In the last number of the *World* we find a number of cases of remarkable precocity in children of the female persuasion becoming mothers at from 13 years and 10 months to 14 years and 2 months old. Two similar cases came under my observation in Bannock City, Montana, in 1867, in which the girls—only little girls—became mothers before they had reached the age of 14 years. But the most remarakble case on record, so far as I know, is that contained in the *Boston Med. and Surg. Jour.*, of February, 19th, 1863, reported by Dr. Josiah Curtis, of Boston, in the annual report to the Legislature, of the marraiges, births and deaths in the State for the year 1847.

Elizabeth Drayton was born May, 24, 1847. Dr. Alfred Baylies, who attended her mother at that time, also attended the daughter Elizabeth, in confinement, on the first day of February, 1858, when a male child was born of her, weighing eight pounds good weight. These dates make Elizabeth just 10 years, 8 months and 7 days old when she became a mother. The reputed father was a boy between 16 and 17 years old, and was detected in the illicit intercourse with Elizabeth on the first day of May, 1857. These dates show that the girl became pregnant 23 days before she was 10 years old, the child being born February 1, 1858, leaving just 9 months between their detection and the birth of the child. Dr. Baylies says: "The mother menstruated once or twice before conception, and was of good size for her age.

Irrigations of Hot Water Subsequent to Parturition.—The question has often been raised as to the necessity for antiseptic treatment if a labor has been

normal and there is no suspicion of infection. The reply to this would be that it is better to anticipate possible trouble by the exercise of suitable precautions. Of the various solutions which have been used in midwifery practice, including those of sublimate, carbolic acid and creoline, the latter is preferable on the ground of safety, and should be used immediately after labor and for the six succeeding days in solution, at a temperature of 50°C. The heat of the solution opposes the multiplication of the germs, and the injection stream will wash away blood clot and any other foreign matter which may be in the uterus. The solution must not be used at the temperature of the blood, as that would favor relaxation of the uterus, while a temperature of 50°C. will excite vigorous uterine contractions. If vaginal injections alone are given efficient uterine contraction will result in many cases without introducing the injection current into the uterus itself.—*A. F. C.—An. Gyn. and Pæd.*

Hypogastric Puncture of the Bladder.—Dr. Deneffe says that too serious a view is taken of hypogastric puncture of the bladder in cases of retention. It ought not to be considered as dangerous, and as a last resource. He quotes a case of hypertrophied prostate which prevented micturition and catheterism, in which the patient was punctured seventeen times without suffering any inconvenience. The seventeenth time, the trocar was allowed to remain, and ten days afterward micturition took place spontaneously through the urethra. Nevertheless, the trocar was allowed to remain twenty-nine days, when it was removed. The fistula was closed in four days, and the patient recovered permanently.

Hypogastric puncture is considered a mild operation by Dr. Deneffe, and he states that he has performed the operation on three hundred and one patients, with a mortality of only two and a half per cent. A patient suffering from enlarged prostrate or stricture suddenly cannot micturate, and this is usually due to a sudden spasm of the posterior portion of the urethra being superadded to the original lesion. Catheterism is not adapted to reduce a spasmodic contraction, and the urethra affected by spasm can only be benefited by the contact of irritating urine being removed.—*Med. Rec.*

The Treatment of Chancroids.—Dr. G. Letzel, of Munich, recommends the following treatment: The ulcer is painted daily for four days with undiluted liquor ferri chloridi. At the end of this time the sore will have become converted into a healthy granulating surface, and is then dusted for a few days with calomel, under which it cicatrizes rapidly. The pain attending the application is inconsiderable, and in only three cases was it found necessary to anæsthetize the part with 5% cocaine solution. Inflammatory reaction is absent or slight. Swellings of the glands were treated with compresses wet in a strong solution of liq. plumbi subacetatis (three tablespoonfuls to a quart of water), and usually disappeared within four days. The iron solution should be applied by the physician himself, the applications being made with cotton on a probe which is firmly pressed against the surface of the sore for some time, and with which every portion is thoroughly brushed out.—*Medic. Chirurg. Rundschau.—Int. Jour. Surg.*

Boroglycerine Cream.—The following formula for boroglycerine cream appeared in the *Chemist and Druggist*, April 26, 1890: Dissolve 15 grains of boric acid in 4 fluid drachms of glycerine, using a little heat to aid solution. Set aside to cool, and meanwhile melt together 80 grains of anhydrous lanoline and 2 oz. of vaseline, coloring the fatty mixture with $^1/_{10}$ grain of alcanin. Incorporate the boroglycerine and perfume with 1 drop of otto of rose and 1 drop of bergamot. This preparation is, according to Dieterich, who has devised the formula, equally suitable for the hands, lips, etc.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service.

FROM SEPTEMBER 8, 1890, TO OCTOBER 4, 1890.

Hutton, W. H. H., Surgeon. Detailed as chairman Board of Examiners. Oct. 2, 1890.

Long, W. H., Surgeon. Detailed as member Board of Examiners. Oct. 2, 1890.

Purviance, Geo., Surgeon. Granted leave of absence for thirty days. Sept. 10, 1890.

Godfrey, John, Surgeon. Detailed as recorder Board of Examiners. Oct. 2, 1890.

Wheeler, W. A., P. A. Surgeon. To proceed to New Orleans, La., for temporary duty. Oct. 3, 1890.

Banks, C. E.,P.A.Surgeon. Granted leave of absence for twenty days. Oct. 3, 1890.

Ames, R. P. M., P. A. Surgeon. To proceed to New Orleans, La., for duty. Sept. 13, 1890.

Pettus, W. J., P. A. Surgeon. To proceed to Vineyard Haven, Mass., for temporary duty. Oct. 1, 1890.

Hussey, S. H., Ass't Surgeon. To proceed to New Orleans, La., for temporary duty. Sept. 19, 1890. To proceed to Norfold, Va., for temporary duty. Oct. 3, 1890.

Wertenbaker, C. P., Ass't Surgeon. Granted leave of absence for twenty days. Sept. 12. 1890.

Perry, J. C., Ass't Surgeon. Upon expiration of leave to rejoin Station at Mobile, Ala. Sept. 29, 1890.

Young, G. B., Ass't Surgeon. To proceed to Memphis, Tenn., for temporary duty. Sept. 13, 1890. To rejoin Station St. Louis, Mo., when relieved at Memphis, Tenn. Oct. 3, 1890.

USEFUL FORMULÆ.

Ozæna.—Lichtwitz gives the following:

℞ Creolin, - - - 3 to 5 drops.
Distilled water, - - - 1 pint.

For douching the nose.

Chronic Gonorrhœa.—Dr. Breima recommends the use of the following in chronic gonorrhœa as an injection:

℞ Creosote, - - - - - - ♏x.
Ext. fl. hamamelis,
Ext. fl. hydrast. canaden., - aa ♏xv.
Aquæ rosæ, - - - - ℥xxxij.

M. Sig.: Dilute with warm water before using.—*Buffalo Med. and Surg. Reporter.*

Migraine.—Dr. Hammerschlag publishes, in the *Allgemeine medicinische Centralzeitung*, the following prescription, which he has found valuable in migraine:

℞ Caffein citrat., - - - grs. jss.
Phenacetin, - - - - " iij.
Sacchar. lacti., - - - " v.—M.

Ft. pulv.

Such a powder may be taken every two hours until the patient is relieved.—*Medical News.*

Catarrh of Pharynx.—The following is claimed to be a useful gargle in catarrh of the pharynx:

℞ Sulph. zinci, - - - - - grs. xv.
Thymoli, - - - - - - gr. ⅓.
Alcoholis,
Glycerini puri., - - - aa f℥jss.
Aq. menth. pip., - - - f℥x.—M.

—*Med. and Surg. Rep.*

For Tympanites.—The following formula for tympanites is quoted in the *Deut. Med. Woch.:*

℞ Naphthol,
Magnesium carbonate,
Pulverized charcoal, - aa grs., 75.
Oil of peppermint, - - drops, 10.—M.

Divide into fifteen powders, of which one is to be given when required.—*Medical News.*

Aristol.—These formulæ for using aristol, the suggested substitute for iodoform, are taken from the *London Chemist and Druggist:*

℞ Aristol, - - - - part, 1.
Flexible collodion, - - - parts, 9.

To be used for painting on the skin. Should be dispensed in a dark-colored bottle.

℞ Aristol, - - - - - parts, 10.
Olive oil, - - - - - " 20.
Lanolin, - - - - - " 100.

Dissolve the aristol in olive oil and mix with the lanolin.

Bougies are made with cocoa butter, each containing from 2 to 8 grains of aristol. Pessaries contain 6 to 15 grains and are made with the same basis.

A Cure For Dandruff.—Dr. A. J. Harrison of Bristol recommends the following salve for dandruff:

Caustic potash, - - - 8 grains.
Phenic acid, - - - 24 "
Lanolin,
Cocoanut oil, - - - aa ℥ jv. M.

This preparation should be rubbed into the scalp morning and evening. Complete cure is usually effected in one to three months.—*Le Progres Med.*

Constipation in Women.—Dr. Lutaud recommends the following in obstinate constipation occurring in women:

℞ Citrate of iron and ammonium, - grs., 31.
Fl. ex. of cascara sagrada, - - ♏32.
Saccharin, - - - - - grs., 8.
Water, - - - - - - ℥ijss.

M.—A half teaspoonful three times daily before meals.—*Medical News.*

Ipecacuanha in Insect Bites.—Dr. Neal recommends the use of ipecacuanha in all cases of insect bites, and states that recently a patient traversed India, bidding defiance to mosquito bites with the following application:

℞ Pulv. ipecac., - - - - - ʒss.
Spt. vini rect.,
Ether sulph., - - - aa ʒss.—M.

This is well worth knowing outside of India.—*Dixie Doctor.*

Treatment of Syphilis by Rectal Injections of Iodides.—According to the *Revue Generale de Clinique et de Therapeutique*, the following formula may be used by the anus, whenever the stomach is disordered:

℞ Iodide of potassium, - - grs. xv.
Extract of belladonna, - - gr. ¼.
Water, - - - - - - ℥iv.—M.

The solution must be warm, and is said to be well borne and effective.—*Med. News.*

Prophylactic Hair Wash.—The following hair wash is said to keep the scalp cool and the hair dry and free from oil; also to prevent dandruff, besides being a most agreeable toilet preparation:

℞ Spirit. etheris, - - - - - ℥jss.
Tinct. benzoin., - - - ℥jss–℥ij.
Vanilin, - - - - - - ♏j.
Heliotropin, - - - - - - ♏iij.
Ol. geranii, - - - - - gtt.j.

M. Sig.: For hair wash. Keep well corked, and do not expose to flame as the mixture is highly inflammable.—*Dixie Doctor.*

Injection for Leucorrhœa.—A. A. Heuskens:

℞ Potass. chlorat., - - - - fl℥iss.
Tinct. opii, - - - - - - fl℥iss.
Aquæ picis, - - - - - fl℥xv.

Two or three teaspoonfuls to a quart of water, used night and morning.—*Med. Bul.*

ADDRESS.

THE MEDICAL STUDENT.

BY JOHN A. WYETH. M. D., NEW YORK,

Professor of Surgery at the New York Polyclinic and Hospital; Visiting Surgeon to Mt. Sinai Hospital; Consulting Surgeon to St. Elizabeth Hospital.

Abstract of the Address, delivered at the meeting of the Missisippi Valley Medical Association, Louisville, Ky., October 9th, 1890.

Mr. President, Ladies and Gentlemen—When I received the invitation to deliver this address and accepted it, I was forcibly reminded of the remarks of a friend of mine, who was brought up in Virginia, but later forgot himself and moved to New York. On one occasion he was quite suddenly and unexpectedly called upon to address an important meeting. He arose with quivering knees and uncertain voice and said: "In the course of a long and not altogether uneventful career, I have been so often called upon to perform duties for which I was wholly unfitted, that I accept your invitation with pleasure."

There are, in fact, but two subjects in which we all have a common interest: one pertains to the "Training of the Doctor" and the other is, "How to collect what you think you have earned." Between the doctor and the patient there is generally such a difference in the estimate of the value of the services rendered that compromise is impossible. Indeed, this subject brings to all of us such unpleasant memories that I did not have the heart to inflict you with an address of which it was the text. I knew you wouldn't stand it. As an old college mate, a practitioner down in Tennessee wrote to me in a letter of recent date: "You city doctors have sure enough fun. You may work hard, but you get paid for it. Here I am riding all over creation, night and day, wearing out horses, saddle-bags and breeches, and when I send in my bill the work has just commenced." It is the same old story, the lean and hungry doctor—lean as a sarcastic world will have it, because like Cassius, he thinks too much; but, as we know, because he works too hard. The world should not forget that the lean horse is the stayer, and that it was the lean kine, that, even in Pharaoh's day, came up out of the river and devoured the fat kine. It is ours to "temper the wind to the shorn lamb," but finally to shear the sheep. The doctor, ever lean and hungry—and yet in my section they have styled him the "Knight of the Golden Fleece." Even Holy Writ is not without its sarcastic fling at our craft, for it says: "And Asa in the thirty and ninth year of his reign was diseased in his feet until his disease was exceeding great; yet in his disease he sought not to Lord but to the physicians. And Asa slept with his fathers." As if anybody, thousands of years ago, could cure Bright's disease. Asa should have lived in this age, for had he lived now, he would not have died when he did. We may rest assured that the author of that paragraph in Chronicles was in good health when he wrote it. The world may poke fun at us while it is well, but the doctor sits next to the dealer and has the last say. No doubt Hamlet had us in mind when he said in his dissertation on the jester's skull, "tell my lady, let her paint an inch thick, to this favor she must come."

The other subject I had to choose, for who among us is not interested in "The Medical Student?" The term comes home to us. It takes us back to the days when we first thought of becoming doctors—when we studied—or made out that we studied, with our preceptor—when we sat in the back office, the split-bottom chair tilted on two legs, our feet on the window sill, poring over Eberlee's Therapeutics or some other tiresome and obsolete work, until the eyes grew weary, the pages faded away and we were dreaming of the great city where we were going to attend lectures. Nor does the interest wane when college life is over and practice is begun; for until usefulness ceases, the honest physician is the Medical Student.

What, then, may we better do than to turn backward for the moment to our younger brothers and point out to them the errors that were made for us, that we ourselves committed, errors which handicapped us in the race of life and caused us to fall short of that more complete success, which, under favorable conditions, would have been ours.

The Medical Student's work should begin with his academic life. Why let the young and inexperienced go heedlessly along until college days are over, before aiding them in the selection of a career? It seems to me not difficult to determine what quality of mind is possessed by youths of sixteen or seventeen years, or to discover for what line of work their talent is best adapted.

The training of the mind is essential, no matter what vocation is chosen; but application in any line of thought and study will develop the brain, give it the power of concentration, make it receptive in memory—in fact, make it a good working machine.

Why not direct this labor into profitable channels? Let him develop his brain in acquiring a useful knowledge of English, Latin, Greek, French, German and physics.

Every one admits that Latin is essential to intelligent medical training.

And Greek is almost as essential.

The two important modern languages next to English, namely, French and German, are not so essential; yet they are of great importance, since one-half of medical literature appears in these languages and they are much easier of acquisition than the Latin and Greek.

It has always occurred to me that anatomy, the foundation of our science, was not taught as it should be. I say this, not only from the standpoint of one who has

lectured on anatomy in the old regulation way, but it is said in the face of the fact that right here in this city, in my old alma mater, there is the most instructive and entertaining teacher of anatomy I have ever known, and I have known many. Mind you, I would not do away with lectures on anatomy. I would make them topographical and regional studies, the master of his assistants dissecting and demonstrating as the lecture proceeds, and the class brought up in repeated practical reviews of the parts gone over. I would have the lecture course, however, of secondary importance to the practical course in the dissecting-room. Give more attention to recitations from text-books; the student who knows he is in recitation and can not dodge, has a stimulus to study which nothing else can give him. Let him get his practical anatomy in hour after hour of work upon the cadaver. I can shut my eyes in our New York schools and pick out the best men of the class by the sense of smell. Don't turn your noses up, you of the gentler type of either sex. Think of the courage it took to overcome this natural repugnance to contact with the dead; think of the sublime enthusiasm which enables him to forget the disgusting stench of decomposition in his effort to master the magnificent labyrinth of bones and muscles, nerves, brain, arteries, veins and organs which you have brought here with you to-night.

I speak feelingly on this subject, for four years of my life I was not admitted into good society, except at my own home, and on one occasion I staggered the devotion of my household, which had patiently endured me through this trying period. I was led astray by a friend who was working in comparative anatomy, and who had gotten hold of a dead camel. I do not know that in his native Sahara the ship of the desert fails in suggestion of the Garden of Gul or the Valley of Cashmere; but I do know that when his Sahara is transferred to the Central Park Zoo, he develops an odor which for strength suggests nothing short of the man who slew the Philistines by talking them to death; and which for sticking to you, surpasses the attachment of her who said unto Ruth, "for whither thou goest I will go." He asked me to assist him in the dissection. I did assist him, but for one afternoon only. When entered my door that night, the rush to embrace me ceased abruptly about six feet off, and then it turned away. As soon as it had recovered enough to speak, it asked: "What under heaven is it, John?" And I said "camel," and the voice came back, "You know I love you, but I draw the line at camel." The result of that experience is that it would be a more pleasant undertaking to get a "camel through the eye of a needle," than even the shadow of one through my front door.

And Chemistry? If the student wishes to prepare himself as a teacher in chemistry or as a professional expert chemist, he should devote years to the mastery of it; but for the practice of medicine, surgery, etc., a limited knowledge only of this branch is requisite.

In materia medica and therapy no student should be considered competent to practice until he can give evidence of a practical knowledge of drugs, obtained by experience in filling prescriptions and in studying the physical properties of the most important remedies in use.

In medicine, obstetrics and surgery it has always seemed to me to be an error to divide the time allotted to these branches between didactic and clinical work. It would be better to devote two sessions of college work entirely to the study of the principles of medicine and surgery. Let the practice come later. That man does well who can master the science of medicine and surgery in two sessions at college. I do not believe any man is able to master both the science and art of these branches in so short a time and be turned out a complete and safe practitioner. The University of Virginia (medical department) has followed this plan for years with the result of turning out the best posted class of students I have ever seen. It is a matter of fact that in the competitive examinations for admission to the medical staff of the army and navy, and these examinations are exceedingly severe, the graduates of this school have been far more successful than those of any other college. This superiority in examinations for appointment on the resident staff of the hospitals in New York city led to the exclusion of graduates of out-of-town schools from the privilege of competing for positions in some of our city hospitals.

But you may say that even a slight knowledge of clinical medicine and surgery is better than none at all, and that it is safer to give a portion of the time devoted to theory to practical work. But I differ from you in this. There can be no half way ground. If there is any force in the old adage that a "little learning is a dangerous thing," it should apply to our profession. Every practitioner should be grounded well in the principles of his science; he should be grounded better in the practice of his art, and if he isn't he gets grounded on the first difficult case he strikes. The man who puts himself in a position where the life of a human being and the happiness of those near to him is dependent upon his skill, and is not equal to the emergency because he has not taken advantage of the opportunities offered to perfect himself in practice, does an unpardonable wrong to his patient and to his profession. Not that anyone of us can be perfect. All honest men make errors, and acknowledge them. Error is stamped upon our humanity. But the conscientious physician does his best to prepare himself for the proper performance of his work; he leaves no stone unturned to become partially proficient in all that is latest and best in the healing art.

Take surgery, and the multitude of operations which belong to it. Can any man become familiar with its technique or master the details of the various procedures from a position thirty or forty feet removed from the patient and operator? The man who learns surgery from the master can not do so through an opera glass or through the body of a fellow-student. He must learn it looking over his shoulders, or be in a position within

a few feet of the field of operation, where every movement of the skillful hand, every stroke of the knife, the quick and accurate adjustment of the forceps as the bleeding points are exposed, and the application of the ligatures may be observed. Where he may note the extreme cleanliness, the aseptic and antiseptic precautions practiced to prevent infection of the wound, and thus shut out suppuration and fever and the thousand dangers which they bring. He should be so near that every word the operator speaks in directing the management of the anæsthetic is heard—the order quietly given to push the patient's jaw forward as breathing is not free, or to desist with the ether for awhile, as the color of the blood in the wound is too dark; to administer a hypodermic of digitalis, as the pulse is growing weak, or of strychnia as the respiration is failing. He should be able to observe closely the final cleansing of the wound and the careful apposition of its surfaces as the sutures are inserted, the precautions for drainage when necessary, the application of the dressing and bandages, and the directions as to the management of the case after the patient is put to bed. He should be so near and be made to feel so at home that he can ask for an explanation of points not clear to him. My heart goes out in sympathy with, and admiration for, the student who is not afraid to ask questions. To my mind, no surgeon is so dangerous as the one who knows it all. It is from this position of vantage that the student of surgery rapidly acquires the necessary knowledge of the technique, and with that confidence in himself, which means safety to his patients and success for himself. This is why I say let us separate didactic entirely from clinical work. Let our colleges give our pupils for two sessions a thorough drilling in the principles of every department of our science and then give them a third session of strictly clinical, beside hospital and dispensary practice, under the constant care and direction of trained teachers.

And this brings me to the last and longest stage in the life of the medical student. The first or preliminary stage is his preparatory or academic life; the second, his medical college life; the third, his practical life, and it extends from the day he leaves his alma mater until usefulness ceases. In the acquirement of a practical training three ways are open to us:

First—Service as interne, preferably for a term of two years in a general hospital.

Second—Service in some post-graduate institution where all departments of practical medicine are taught by teachers especially trained in their respective branches.

Third—Service as assistant to one or more well-qualified practitioners in general medicine.

To this last method there are many objections. In the first place, very few private patients are willing to be the subject (however interesting) of a clinical study for the benefit of the junior member of the firm. Moreover, the general practitioner is worked so near to death that he has not the time nor opportunity to post himself up to date, and medical science and art are moving in this age with such rapid strides that the man who does not keep up to date is like a last year's bird's nest—neither useful nor ornamental. Just as it is with the fashions. Get away from the great cities and go into the remote rural districts. It occurs to you that every lady you meet you have seen on some previous occasion. You look at them and wonder why you are not recognized and finally you realize that it is the bonnet and the dress you were acquainted with in New York two years back. Now, the hard-worked general practitioner is very apt to wear last year's clothes. The surgery of to-day is no more to be compared to the surgery of a few years ago, than the planet Jupiter to some star that has disappeared forever into fathomless space. With all the marvelous achievements of those Daniel Boones in surgery, could the peerless Dudley and that immortal pioneer of ovariotomy come back to us, they would have to go to school again before they could practice surgery.

Since 1887, the year that Professor Flint, the great teacher, writer and practitioner of medicine, went to his eternal rest, it has been demonstrated and accepted that lock-jaw is caused by the entrance into the system through the broken skin of a micro-organism, the specific germ of tetanus; that this germ is common to the soil in all temperate and torrid zones, and that it is destroyed and infection prevented by bathing the wound immediately in a 1 to 3,000 corrosive sublimate solution and dressing it aseptically. It has been accepted that hydrophobia is prevented and cured by the inoculation of the patient with the attenuated virus, as discovered by Pasteur. And, marvelous to relate, it has been announced from Berlin this summer that Prof. Koch, who discovered the specific germ of tuberculosis, has succeeded in cultivating an attenuated virus with which to prevent the march of this dread disease, consumption, of which it is authoritatively stated that one-half of the entire population at some time in life acquire it, and about one of every four adults' deaths is caused by it. If not done, that it is to be achieved, I do not doubt. By vaccination with the attenuated virus of small pox, this disease has practically disappeared from the earth; and if this also be true of lock-jaw and hydrophobia, it must be true of tuberculosis and of all diseases due to special micro-organisms.

Preparatory to entering upon the active practice of our profession, there is one method of clinical training almost ideal, namely, service as interne in a general hospital.

Now, in addition to certain special advantrges to the internes, the outside practitioners are also admitted to witness the operations and treatment. New York City has ten great hospitals doing this missionery work. Louisville should have at least four, and every city in this country should strive to follow the example of the metropolis.

I wish you could believe in all that I have said as I

believe in it. I do not come to you as one of the wise men from the East. I speak from the experience begun in horseback practice in the mountains of Alabama and the swamps of Arkansas. The wisdom that I bring is not genuine Eastern wisdom; it is galvanized. It has the glare of the South about it, and up with us they sometimes intimate that it is brazen. Be that as it may, the Southern doctor can hold his own even in the land of the golden calf. Marion Sims did it pretty well until one hemisphere could not hold him, and two were none too large, for he died, like Alexander, with no more worlds to conquer. Emmet, Thomas, Metcalfe and Bozeman have done honor to their birthplace in the land of sun and flowers. And Polk and Wyile and Gibney, Gray and Dew are there now in the front of the fray, and I might mention another modest man who hasn't slept much for the last twenty years. But I won't. He is too much like the editor of a country paper out in Ohio who laid himself out to write an obituary notice of Charles Sumner. After expatiating upon the many virtues of this distinguished statesman, he wound up with the apostrophe: Lincoln, Seward, Chase and Sumner are gone; all the great men of this country are passing away, and I don't feel so very well myself.

ORIGINAL ARTICLES.

OPERATIONS UPON THE ENLARGED PROSTATE.

BY WM. T. BELFIELD, M.D., OF CHICAGO.

Abstract of a Paper Read Before the Mississippi Valley Medical Association, at Louisville, Ky., Oct. 9, 1890.

Surgical interference becomes necessary for the relief of two conditions due to prostatic enlargement: 1. Acute retention where catheterism is impossible. 2. Chronic retention causing severe cystitis, where self-catheterism is impracticable or impotent to relieve.

The first condition—acute retention where catheterism is impossible—is in my experience never met except as the result of forcible attempts to introduce metallic instruments. If the physician first called to a case of acute retention would use only rubber or elastic catheters, he would rarely fail to enter the bladder; for the obstruction is merely an œdomatous swelling, not an organized stricture. Unfortunately, the common practice is to resort to metal instruments and, if the first attempt fail, to force; thus are made false passages, after which even the most skilful hand may fail to introduce any catheter. Under these circumstances, the urine should be withdrawn by supra-pubic aspiration or puncture with a fine trocar—a safe and simple procedure, and yet one whose value does not seem generally appreciated. After relief of tension and swelling by this means, spontaneous urination or easy catheterism usually follows.

The relief of the second condition—severe cystitis from chronic retention—is a more serious problem, which has, however, been solved by various operations during the past five years. Temporary drainage of the bladder by perineal or supra-pubic incision affords a relief complete, but of uncertain tenure; the factors which induced the original malady remain undisturbed; they may, and as experience shows, they often do cause a recurrence of this trouble; hence the need for radical procedures.

The simplest attempt at permanent relief is the supra-pubic fistula, a measure practised in various ways for half a century; its most satisfactory form is that recommended by McGuire, of Richmond, who makes the fistula run from the lower angle of the vesical wound to the upper end of the cutaneous incision, thus "bearing the same relation to the bladder that the spout of a coffee-pot does to the bowl." A permanent fistula is, however, a mutilation obviously to be employed only when the restoration of the natural channel seems impracticable; moreover, aside from the objections on the score of sentiment and comfort, the fistula sometimes fails to relieve the cystitis—probably because the prostatic tumors projecting into the bladder, like foreign bodies, cause mechanical obstruction. Bennett May, among others, reports three such failures in his own practice, one of which he subsequently relieved of cystitis by excision of a projecting middle lobe. It would seem only rational that if the surgeon goes so far as to make supra-pubic cystotomy and discovers prostatic outgrowths, he should certainly take advantage of the opportunity to restore the natural channel, rather than inflict a mutilation of doubtful utility in the form of a permanent fistula. In exceptional cases the restoration of the urethra may seem impracticable and the permanent fistula therefore a justifiable substitute.

The removal of prostatic obstructions, the radical operation, has been sought by four avenues of approach:

1. The urethra (Mercier, Bottini).
2. Perineal urethrotomy (Harrison, Keyes).
3. Supra-pubic cystotomy (Belfield, Kummell, McGill).
4. Combined perineal and supra-pubic incisions (Schmidt, Belfield).

These represent successive stages of development; the primitive attempts of Mercier, and the modification by Bottini, seem to be haphazard procedures, based on a faulty conception of the nature of the obstruction. They may, doubtless, by a happy chance, be sometimes successful.

Perineal urethrotomy secures digital contact with the prostate and often permits intelligent operation upon the obstructing prostatic growths. Experience shows, however, that in the greater number of cases requiring operation, the prostatic urethra is too long and too rigid to permit the removal, or even the detection of the commonest obstacles, namely, the tumors of prostatic tissue which project, in the shape of median or lateral lobes, into the vesical cavity.

Supra-pubic cystotomy affords complete access to

these projecting lobes, but in a few instances has failed to reach obstacles projecting into the prostatic urethra; in other words, has failed to restore a low level urethra. Schmidt, of Cuxhaven, reports a striking example, where supra-pubic excision of a large middle lobe failed to restore voluntary urination or even easy catheterism; but after a subsequent perineal urethrotomy and incision of a hard mass in the prostatic urethra, both were regained. I have had a case essentially similar.

In the abstract, therefore, supra-pubic cystotomy, with or without a supplementary perineal incision, as the exigencies of the particular case may require, is *the* operation for the removal of prostatic obstacles. Yet many patients are, when they reach the surgeon, too feeble to endure this procedure; in such cases the perineal operation is to be preferred; it gives temporary relief in all cases, complete cure in a fair minority, and, because so quickly performed, includes less danger of uræmia and shock, the two chief causes of mortality in these old men.

I have collected 133 operations on the enlarged prostate, performed prior to July 1, 1890. Of these 41 were perineal (mortality 9%), 88 supra-pubic (mortality 16%), and 4 by combined incision (none fatal). An important question to be decided is of course whether voluntary urination can be restored in cases habitually dependent upon the catheter. For this purpose only 56 of the 133 cases are available, the reports of the remainder being incomplete.

Of these 56 persons who had been dependent on the catheter for periods varying from 1 to 10 years, all were relieved of cystitis, and 38, or two-thirds, recovered the power of voluntary urination; in the remaining 18 the operation failed to restore this function.

Excluding the cases complicated with calculi—where it might be objected that the benefit accrued less from the prostatectomy than from removal of the calculus—there remain 41 cases of operation for the restoration of the urinary channel; of these 32, or four-fifths, recovered the power of urination; in 9 the operation failed to restore this function. The successful cases were under observation for periods varying from 6 months to 2½ years after operation.

Radical operation upon the enlarged prostate is, therefore, an established procedure, worthy of general consideration; the pioneer results will naturally be improved by added experience.

INGUINAL COLOTOMY, WITH REPORT OF A CASE.

BY ARCH DIXON, M.D., HENDERSON, KY.

Abstract of a paper read before the Mississippi Valley Medical Association at Louisville, Ky., October, 1890.

The paper began with report of a case of inguinal colotomy for volvulus of the sigmoid flexure. The operation was done seven days after obstruction took place and with scarcely a hope of recovery for the patient. He was a young man, æt. 22 years; the operation was considered justifiable for the relief of the intense pain which was present at all times. I saw the case for the first time on the day upon which I operated. The treatment had been purgative from the start to the finish, with such a result as one would naturally expect. Madelung's operation was done; the colon was cut through below the volvulus, the end turned up and carefully stitched with Lembert sutures of fine silk. This was dropped into the cavity and then the gut was clamped and cut through above the obstruction. The cut end was stitched to the parietal incision. The wound was dressed with a pad in the usual way. The patient died 32 hours afterward from exhaustion.

The author then reviewed and compared lumbar and inguinal colotomy, giving the decided preference for the inguinal. The views of Allingham (Sr. and Jr.), Chavasse, Cripps, Kelsey and others were given in support of the position taken, as follows:

1. The position in which the patient lies for this operation is better at the time of operation for the patient, the operator and the anæsthetist.

2. There is not so much tendency for the gut to fall away from the wound, neither at the time nor after the operation.

3. The intestine is more easily found, especially on account of the incision being made higher than usual. The result of 500 post-mortem examinations was quoted to verify this statement.

4. The fæces do not pass below the artificial opening if a good spur be made.

5. There is less constitutional disturbance.

6. There is little or no suppuration.

7. The tendency for the opening to contract is not greater. Chavasse, of Birmingham, advances the following reasons why he prefers the inguinal to the lumbar operation (6):

1. It is readily performed.

2. The patient is readily able to attend to his or her wants in connection with false anus.

3. The patient is able to lie on his back without discomfort.

4. In malignant disease four or five inches more of the colon are left for it to perform its duties.

5. Being nearer the seat of the disease the operator is able to ascertain, if necessary, the precise limits of the growth. As a matter of practical experience, he states that he has always found that the opening in the sigmoid flexure has been sufficiently remote from the neoplasm not to become implicated during life. Malignant disease of the flexure, except at its juncture with the rectum, is of rare occurrence. Up to this time he had performed inguinal colotomy thirteen times without a death.

Cripps (7) records the results obtained by him in 37 operations, 15 of which were lumbar and 22 inguinal, with two deaths, a mortality of rather more than 5%. The mortality of this operation has been very great; the

analysis of collected cases—244—of lumbar colotomy made by Ball in 1884, gave a mortality of 32%. The inguinal operation gave a mortality of over 50%. These statistics, he thought, represented the results up to that period, but were misleading as affording any indication of what may be expected of the operation at the present time under favorable circumstances. He regards colotomy as an operation of great delicacy, requiring good anatomical knowledge with trained manipulative skill. The preparation of the patient, the hygienic surroundings and the subsequent treatment of the wound all demand most careful consideration, and materially influence the result. The chief objections to the lumbar operation were stated to be;

1. The absence of sufficient working space between the lower border of the last rib and crest of the ilium.

2. Difficulty in the identification of the bowel in the limited space; the longitudinal bands are sometimes impossible to recognize; numerous instances are recorded where the small bowel, the duodenum, or even the stomach, have been opened by mistake.

3. In fat or muscular patients there is difficulty, owing to the depth of the bowel and its want of mobility, in fixing to the skin without undue tension.

4. Abnormal deviations of the bowel, rendering it impossible to find it by this incision.

5. Inconvenience of the opening behind for cleanliness and adjustment of pads.

Inguinal colotomy meets all these objections by affording a space in front, practically unlimited, through the incision, in which the bowel can be carefully inspected and identified by its longitudinal bands, its convoluted surface, and its glandular epiploicæ. The mobility of the sigmoid flexure and laxity of the skin remove any difficulty in fixing the bowel without undue tension. The ease with which thorough exploration of the cavity can be made through this incision removes all difficulties attending an abnormal course of the colon. This method possesses also an advantage in enabling the surgeon to verify the diagnosis by free exploration. The objections urged against the method are the tendency for prolapse of the bowel which occurs, and that it is unsuitable for urgent cases. The first can be overcome by drawing down the bowel to its full extent, and the danger in the second is believed to be more imaginary than real.

Madelung (8) recommends that the colon be completely cut through, the lower opening being closed and returned, the upper opening being sutured to the skin.

ADMINISTRATION OF MORPHINE BY THE NOSTRILS.

BY CARL H. VON KLEIN, A M., M.D., DAYTON, OHIO.

Delivered before the American Rhinological Association, Louisville Ky., Oct. 8, 1890.

In the administration of morphine by the mouth, there is generally besides an unprecipitate taste, a great deal of hacking and spitting, in many to such an extent that it produces an irritation of the throat, especially of the soft palate.

If used repeatedly it excites the same irritation of the lips and tongue as in the use of opium, and has been known to blister the mouth.

In persons not accustomed to the taste of morphia it produces nausea and vomiting.

1. Dr. Billroth (*Wiener Med. Woch.*, 1868, p. 763) reports in the case of a lady who took small doses 0.007 gram (gr. $^1/_9$), and even 0.003 gram(gr. $^1/_{22}$), so much anxiety, nausea and vomiting, that, although suffering intense pain, she refused to take the remedy again. Cases of the same nature have been reported by Laborde.

Wernick (*Arch. f. Psychiatrie, Bd.* p. 174.) has called attention to the occurrence of a paræsthesia of taste after the use of morphia.

As a rule where persons are found to dislike the taste of morphia or where it is desired to have a rapid physiological action, the hypodermic method is resorted to; this, too, finds opposition on account of puncturing the skin and the danger of producing abscess.

The new method of administering morphia through the mucous membrane of the nose, which I will now describe, has been thoroughly tested by me in over one hundred cases where the immediate physiological action of morphia was necessary.

I have found it to be more reliable, tasteless and prompt in action than when given by the mouth or hypodermically.

It requires much smaller doses than when taken by the mouth, and no larger than when given hypodermically.

The manner of administering morphia through the olfactory canal is simply by snuffing it up the nasal chambers in the same manner and in the same way as tobacco snuff is used.

You divide the dose intended in two equal parts and each part is placed upon the end of the thumb and snuffed up into the nostrils.

The membranes being very soft and delicate it instantly begins to be absorbed. I have tried it on myself on several occasions, and it seemed that there was almost instantaneous absorption. No more than fifteen seconds after the introduction, I have blown my nose and nothing could be found in the secretion. However, in poor qualities of morphia the drug will not absorb as readily.

In cases where the nasal chambers are incrustated and covered by dry secretions, the cavities should be cleansed before administering; care should be taken not to snuff it up strong enough for it to pass into the throat. If the drug is a poor quality it will produce sneezing, but the narcotic effect will be the same.

The method of administration I have now described to you, in addition to being tasteless and rapid in action, will be found to retain its narcotic effect for a longer period than when taken either by the mouth or by the hypodermic method.

TRANSLATIONS.

PROCEEDINGS OF THE TENTH INTERNATIONAL MEDICAL CONGRESS.

TRANSLATED BY DR. F. NEUHOFF, ST. LOUIS.

[CONTINUED.]

TUBERCULAR PERITONITIS.

Dr. Kœnig delivered an interesting address on the ascitic form of tubercular peritonitis treated by laparotomy. Out of 14 cases treated by himself, he had only 4 deaths. They were due, one to collapse, and three to acute peritonitis. Kœnig has besides collected 181 laparotomies made for tubercular peritonitis. Of these very many were cured.

Tubercular peritonitis is a disease which is more frequent with women than with men. It is difficult to say whether the cures of it were all permanent, although in two cases, which later on died of some other disease, no tubercles were found in the peritoneum. One cure obtained by Spencer Wells has lasted for 25 years.

A cure results just as well when simply an incision into the peritoneum is made, as when the peritoneum is washed and relieved of tubercular and caseous masses. Thus Kœnig reports a case in which the surgeon found the peritoneum studded with tubercles. He made simply an incision, and the morbid phenomena rapidly vanished. The employment of germicides has no influence on the result.

Very often there exists, at the same time with tubercular peritonitis, a tubercular intestine which plays the part of an infecting center.

Kummel has had 8 successful cases out of 9 laparatomies for tubercular peritonitis. But two of the patients died later on of penitonitis, and 3 had fistulæ—*L'Union Med.*

INDICATIONS FOR EXTIRPATION OF THE UTERUS PER VAGINAM IN CANCER.

Pozzi advises removal of the uterus as soon as cancer of the cervix is diagnosed. Naturally, the chances of a successful result are greater, the sooner the amputation is performed.

The radical operation is not more dangerous than partial amputation, and this latter always exposes to a recurrence of the disease, for it is impossible to tell for certain, by a clinical examination, whether the morbid process has passed beyond the upper part of the neck of the uterus.

Statistics show a death rate of 10 in 100, of cervical amputations, and 14 in 100 of vaginal hysterectomies. The latter per cent is even lowered to 5 and 4 in the practice of certain operators.

The uterus should not be extirpated when the disease has passed the limits of the uterus. For in these cases recurrence is very rapid and the operation is very serious. Palliative treatment with curette and cautery is alone indicated under the circumstances.

When the uterus is removed, the appendages should always be examined, and if diseased they too should be removed.

In cancer of the cervix, Pean recommends removing the cervix first, and then lowering and removing of the body of the womb. In this way, the peritoneum will not become soiled by debris. When it is the body that is affected, the cervix should first be removed, and then the body in portions.

Pean prefers hysterectomy to tubo-ovarian castration, in neuralgias and suppurations of the uterus and appendages. He has found it indicated also, in preference to castration, in myomas of the uterus which have the size of a fœtal head at term.—*L'Union Medical.*

CAUSES OF DEATH FROM ANÆSTHESIA.

Horatio Wood of Philadelphia: Like antisepsis, anæsthesia has revolutionized surgery. But, while the employment of antisepsis has at present become almost harmless, anæsthesia still claims annually about the same number of victims.

To determine the cause of death from anæsthetics, I have experimented on the lower animals, separately with nitrous oxide, ether and chloroform.

Nitrous oxide shuts off the oxygen supply to the nerve centers. It raises the artificial pressure, and renders the pulse at first irregular, and later on full. The rise in artificial pressure varies widely. In poisoning from nitrous oxide, the respiration stops while the heart is still beating. Even while the animal appears moribund, artificial respiration suffices to reanimate him.

Deaths from nitrous oxide are very rare, although it is used extensively in America. Sometimes cerebral hæmorrhage results from the increase of artificial pressure. Unfortunately the effect of nitrous oxide lasts such a short while that it can not be employed for large surgical operations.

It is admitted, that ether in moderate doses stimulates the heart. In large doses, it depresses the heart and more especially the respiration. Chloroform either paralyzes the respiratory centers or it arrests respiration and circulation simultaneously. The influence of its vapors on the heart may also produce sudden death.

Lauder Brunton claims that chloroform never acts by a sudden arrest of the heart. I claim that it may paralyze directly and simultaneously both heart and respiration. In dogs sometimes the respiration is arrested before the heart, and sometimes the contrary happens. Climatic influences may modify the manner of death by chloroform. For in the South death from this anæsthetic is much less frequent than in the North.

Ether at first raises and then lowers the blood pressure. In two cases, I saw the respiration continue two minutes after the heart stopped. This latter occurrence

is at least more easily produced by ether than by chloroform; the latter is therefore the more dangerous agent.

Statistics show the same thing. Thus, as to ether, Andrews records 1 death in 22,204 anæsthesias; and Lyman 1 in 16,542. As to chloroform, Richardson records 1 death in 3,000 anæsthesias; and Lyman 1 in 5,860.

Chloroform alters profoundly the respiratory and circulatory centers. Its action is more persistent than that of ether, probably because, being less volatile, it remains longer in the organism.

If ether is not employed much, it is because the method of its administrator is not understood. Air should be mixed with it in large quantities, and certain inhalers are excellent, because they effect this mixing and thus prevent the initial suffocation. In eight minutes, complete anæsthesia can be attained.

As to the treatment of poisoning by anæsthetics, I have tried ether, alcohol, ammonia, nitrite of amyl, digitalis, atropine, caffeine, change of position, and artificial respiration.

Ether has no beneficial action, caffeine produces no effect on the arterial pressure. Alcohol increases the poisonous action of the chloroform. The above are therefore not to be used.

On the other hand, digitalis raises the arterial pressure. And strychnia in doses of one-fifth of a grain injected into the veins has given very good results. It acts both on the arterial pressure and on the respiration.

Elevation of the feet of the animal in which circulation and respiration have ceased, raises the blood pressure and can make the heart resume its beating. Just so turning the body causes the blood from the abdominal veins to flow into the right side of the heart and thus to stimulate the organ.

The best of all methods of treatment however, is artificial respiration. It may be carried out on man by means of a large bellows. Periodic electrization of the skin is a useful adjunct.

As to remedies, strychnia, digitalis and aqua ammonia are the only useful ones. Mechanical obstruction to the respiration should be guarded against by pulling on the tongue and raising the angle of the jaw.—*l' Union Med.*

[TO BE CONTINUED.]

MEDICAL CHARITIES IN NEW YORK are increasing at an alarming rate. In 1889, 100,000 patients were treated at the Vanderbilt Dispensary, the figures for the other dispensaries taken together being 350,000, the total number of recorded charity patients being 450,000. One out of every three or four inhabitants receives free medical advice. The figures are given differently from various sources, but whether the above mentioned figures be correct or not, the statement first made is undoubtedly correct.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

Communications relating to the literary part of this journal should be addressed to the editor, at 1006 Olive Street.

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Secretaries of societies will confer a favor by keeping us informed as to the time and place of meeting of their respective associations.

SATURDAY, OCTOBER 25, 1890.

THE NEWLY INAUGURATED EXAMINATION LAW IN NEW YORK.

In New York state the law recently passed with regard to the preliminary examination of persons designing to enter upon the study of medicine or law has gone into effect, and it will doubtless be of much service in lessening quackery in both professions. The previously existing law was a very lax one, not very different from that now in force here, and simply required the registration of accredited physicians. The new law requires that all persons desiring to practice law or medicine must first pass an examination in the branches of a common school education before the regents of the University of the State of New York, and even experienced physicians desiring to enter practice in the state may be required to submit to it. All students must pass satisfactory examinations in arithmetic, geography, grammar, United States history, English composition and spelling. Medical students must also pass in either physics or physiology, and law students in English history. The examinations are held in September, November, January, March and June, and a percentage of 75 is required in order to pass; students who fail can always try again. They are allowed three hours for each subject, the answers being written. Some of the questions asked in September came right up to date, and the answers returned gave an idea of the amount of general knowledge possessed by the candidate. To illustrate, some of the questions asked in geography were:

Mention in the order of their size the largest three cities of the United States, as determined by the census of 1890?

What States of Central America have recently been at war?

What country of South America recently changed its form of government and what was the change?

Describe the Congo River, telling where it rises, in what direction it flows, and into what it empties, and give the name of the explorer who first traced it from its source to its mouth.

Atropine and Morphine in Chloroform Anæsthesia.

The plan of combating the noxious effects of chloroform by administering morphine and atropine does not appear to be altogether free from danger, for we see by the *American Medical Association Journal* that Dr. Reynier of Paris has had a death which he believes should be directly attributed to the combination of these three drugs. In a paper read before the Surgical Society he stated that he had employed the method a number of times; once in operating upon a girl æt. 16 years, suffering with a tubercular bone trouble of the hand. Half an hour before the operation he had injected hypodermically $^1/_6$ grain of morphine and $^1/_{120}$ grain of atropia; the anæsthetic was easily given, an ounce of it being used. Ten minutes after leaving off the administration of chloroform the patient suddenly ceased breathing and the heart to beat. Artificial respiration was kept up for three hours, but without effect. The autopsy made by Prof. Verneuil, revealed nothing more than anæmia of the bulb. Dr. Reynier believes that death was caused by bulbar paralysis from chloroform. Atropine and morphine are slowly eliminated, and the excretion of the chloroform is also retarded. In order to clear up the subject Dr. Reynier undertook a series of experiments which showed that atropine stopped the heart more quickly, and while it renders accidents at the commencement of anæsthesia less imminent, it also exposes more to accidents at the end and renders them more dangerous. The other opinions expressed by those present did not seem to be any more favorable to the plan. Dr. Tessier, who has also had a fatel case of this kind, does not believe that the method is of very much service in lessening the period of excitement and rendering the awakening more gradual. Another physician present very justly remarked that by giving chloroform carefully in small quantities we never meet with the accidents that are sought to be avoided by the administration of morphine and atropine.

Chorea Minor in its Relations to Rheumatism and Valvular Disease of the Heart.

For the last five years, Dr. P. Meyer has been gathering all the cases of chorea minor in children occurring at the Berlin Polyclinic in order to throw more light on the old and much-disputed question as the relations between chorea minor on the one hand, and rheumatism and valvular heart troubles on the other. (*Berl. Klin. Wochensch.—Deutsch. Med. Ztg.*) While Rilliet and Barthez deny any dependance of that sort, Riger, Adams, West and others as strenuously affirm it, and there are others still who admit a certain relationship to rheumatism, but not to heart troubles. Henoch also says that chorea has nothing to do with heart troubles, but that both are due to the same cause, rheumatism, which seems in some unexplained manner to act upon the coordinative centers. According to Meyer, we must take into consideration the fact that in children rheumatism does not always make itself manifest by noticable swellings of the joints, but often appears in the form of vague, rheumatoid pains in the neighborhood of the articulations, so that in order to demonstrate rheumatic endocarditis in children it is not always necessary to have swellings of the joints; rather, that the coincidence of pains in the joints and limbs and a systolic murmur give sufficient reason for diagnosing a rheumatic endocarditis. Another thing which leads to confusion is the fact that children do not, as a rule, remain under observation for a sufficient length of time. We cannot therefore with certainty conclude that a child, in whom the first examination revealed chorea or a valvular murmur, did not at a later period suffer with rheumatism, and vice versa, for it is a well-known fact that the order in which these three diseases appear varies greatly.

Within the last five years 18,074 children came under observation and treatment, of which there were 121 cases of chorea, or 6%. Of these 121 cases 46 were boys and 75 girls. This shows also the preponderance of the female sex, which has been noted by many observers. The majority of the cases were between the ages when chorea is most usually observed, that is, between the second dentition and puberty, but there were nine cases under this age, one boy and eight girls; the youngest was a girl, æt. $3\frac{1}{4}$ years. Cases younger than this have been observed, one by Bouchut æt. 5 months, although this latter seems questionable to the author. Relapses occurred in eleven cases, six boys and five girls; in a girl æt. 10 years, the disease occurred six times. Of the 121 cases, rheumatism was found in eleven or 9%, either shown by the previous history or existing at the time; five were boys, six girls. In 3 cases, or 2%, both rheumatism and valvular disease was present, valvular lesions were found in 13 cases, or 16%; six were boys, five girls. The mitral valve was affected in eleven of these, in one the aortic valve, and in one the aortic and mitral valves.

To recapitulate, chorea was found in 6% of the cases treated in five years, or 121 cases; in 9% rheumatism was present, in 13% a valvular lesion was found and in 2% both affections were present.

From these figures the author draws the following conclusions: Chorea minor is only a symptom complex, for which, as for convulsions, there is the weakest variety of etiological factors. Of course convulsions may constitute the disease itself, in which case we have

eclampsia, or in later years, epilepsy; they may also appear as one of many symptoms, as a result of fever, various kinds of intoxications, etc. In the same way we may have chorea appearing idiopathically, as a disease per se, a neurosis, generally the result of physical disturbances. Cases also occur in which chorea occurs in company with other symptoms as an indication of tuberculosis of the brain. Lastly, chorea appears in a disease, in which the symptoms of rheumatism, endocardial processes, and chorea, are brought together, symptoms for which the rheumatic virus may furnish the common etiology. Yet in this as in other diseases, all the symptoms may not be present at one time, so that here we may find as the result of a common cause rheumatism and a valvular trouble, there a valvular lesion and chorea, or again, rheumatism and chorea, and yet observe the three together only in the rarest of cases.

MEDICAL ITEMS.

The press of original matter on our columns has compelled the exclusion of a Report on Progress in this issue.

Tobacco Smoke passed through cotton-wool charged with pyrogallic acid, is said to be freed from nicotine. This is recommended by M. Gautier, a French physician.

The New Tariff and Medical Books.—Under the new tariff law foreign medical books printed in any other language than English are admitted without the payment of duty.

A New source of lead poisoning has been discovered in Chicago. It seems that millers are in the habit of branding their flour-sacks with heavy blotches of paint, which soaks through the cloth and into the flour.

Burials Without Death Certificates.—It was lately stated in the British Parliament that fifteen thousand persons are buried annually without any medical certificate of death. The government has promised to inquire into the matter.

The Southwest Missouri District Medical Society, which has just concluded a very successful session at Springfield, voted to meet again at the same place next May.

We will soon present, in the Review, the most interesting papers read at the late meeting.

Artificial Tongue.—Dr. Poncet, of Lyons, has invented an artificial tongue for improving articulation in cases where that organ has been extirpated. The apparatus consists of a "pocket" of soft rubber containing fluid, and jointed on to a plate which is fixed to the lower teeth. "A patient wearing this apparatus can eat and speak quite satisfactorily, and there is no dribbling of saliva, the latter being swallowed as in health."—*Edinburgh Med. Jour.*

Consumption of Salt.—According to statistics recently published, there is more salt consumed in England than in any other country in Europe. In France the consumption is 15 kilogrammes a head; in Italy, 10; in Russia, 9; in Austria, 8; in Prussia, 7; in Spain, 6; in Switzerland, 4; in England 20 kilogrammes.

A Policlinique at Paris.—An institution has been opened at Paris, which bears a close resemblance to the post-graduate schools of the United States. It is located at No. 28 rue Mazarin, as a dispensary and teaching institution, under the title of the Policlinique de Paris, and is designed to become a centre for practical medical teaching.

Boroglycerin Cream.—According to the *Philadelphia Reporter*, the following preparation is said to be excellent for chapped hands, lips, etc:

Dissolve one part of boric acid in 24 parts of glycerin; add to this solution 5 parts of lanolin free from water, and 7 parts of vaseline. The preparation may be colored and perfumed.

Revival of the Apprenticeship System.—Mr. Lawson Tait, in a paper before the recent Congress at Berlin, advocated an application or a re-application of the apprenticeship system to the study of young surgeons. The period of apprenticeship should be, according to Mr. Tait, two years. Hospital practice does not, he thinks, take the place of study of the management of patients in their own homes.

Precautions for Undertakers in Infectious Diseases.—At the suggestion of the Counseil d'Hygiene the prefect of the Seine has made a regulation that undertakers, before placing the bodies of persons dying of infectious disease into their coffins, shall cover their clothes with a long cloth blouse. Before they leave the room each blouse is to be placed in a tin box, and both the box and its contents must be disinfected each time they have been used.

Vaccinating the Leg.—Some of the lay papers are making a stir over the order recently issued by Health Commissioner Wickersham of Chicago, directing that no physician in his department shall vaccinate on the leg without special instructions to that effect, many girls now refusing vaccination on the arm because of the unsightly scar. The Commissioner appears to be assuming too much. What difference does it make to him?

Creolin in the Treatment of Chancroid.—The *Bulletin General de Therapeutique* (*N. Y. Med. Jour.*) of July 15, published an account of the experience of

Dr Jose Busque, of Pelotas, Brazil, on the use of creolin as an application to soft chancres. It was used in the proportion of from 12 to 20 parts of creolin to a thousand parts of water, and is stated to have caused the sores to heal rapidly even in cases in which the action of corrosive sublimate and that of iodoform has been tardy. However, the most rapid healing was secured by employing creolin and iodoform together.

An Improvement in Ipecac.—Experiments are now being made in India, to ascertain by clinical evidence whether ipecacuanha from which the principle, emetine, has been removed, after a process devised by Surgeon-Major Harris, still retains its efficiency in the treatment of dysentery. It is to be hoped that such will be the case, for the nausea and vomiting so apt to be produced by this drug constitute a formidable drawback to its use in this disease, many patients refusing to take the "horse medicine" a second time.

Notes on New Pharmaceutical Products.—The valuable little pamphlet of "Notes on New Remedies," that has been issued monthly by Frost & Ruf, of this city, has grown, until the October number, beginning the second volume, assumes journalistic proportions and dignity; and the features which have proved so acceptable in its predecessor have not only been continued, but increased in the present enlarged form of the production.

We are glad to welcome this mark of progress and well-directed activity to our exchange list, and bespeak for it a most successful future.

Prevention of Blindness.—Statistics of the institutions for the blind in the State of New York show that in almost a fifth of the cases the loss of sight can be traced to ophthalmia neonatorum. The sufferers belong largely to the social stratum in which midwives and untrained nurses are the sole attendants on lying in women. The New York Legislature recently passed an enactment which came into effect September 1, by which it is provided that if any midwife or nurse having charge of an infant notices that its eyes are reddened or inflamed at any time within two weeks after its birth, she must report the fact in writing to the nearest health officer, or to some legally qualified medical practitioner. Failure to obey this regulation is made punishable by a fine not exceeding one hundred dollars, or imprisonment for not more than six months. It is a question whether the law will do all that it is intended to accomplish.

A Peculiar Libel Suit.—One physician of Buffalo has brought suit against another for $25,000 damages for calling him a quack. The chief interest in the case lies in the fact that this much-used and often-abused word is now likely to be defined judicially. The plaintiff had called the defendant in consultation on a case of hernia, which he had treated by electricity. The relations between them became strained, for the plaintiff says that at a meeting of the County Medical and Surgical Society in the Iroquois Hotel on September 2, the defendant spoke of him thus:

"The use of electricity is now practised by a notorious quack of Buffalo for the cure of hernia. This quack pronounced the patient cured of hernia after treating him, and a few days afterward the patient was taken with symptoms of strangulation."

The words were reported and published in the Buffalo *Med. and Surg. Jour.* by the secretary of the meeting. For these words the plaintiff wants $25,000 damages, and says he will sue the *Med. and Surg, Jour.*, which published the words in its October issue. Both parties in the suit are regular practitioners of medicine. —*Bost. Med. and Surg. Jour.*

CORRESPONDENCE.

HYDROPHOBIA TREATMENT AT THE NEW YORK PASTEUR INSTITUTE.

New York, October 18, 1890.

Editor Review.—Dr. Paul Gibier, Director of the New York Pasteur Institute, begs to inform you of the results of the preventive inoculations against hydrophobia performed at this Institute since its opening (February 18, 1890).

To date 610 persons, having been bitten by dogs or cats, came to be treated. These patients may be divided in two categories:

1st. For 480 of these persons it was demonstrated that the animals which attacked them were not mad. Consequently the patients were sent back after having had their wounds attended, during the proper length of time, when it was necessary. 400 of this series were consulted or treated gratis.

2d. In 130 cases the antihydrophobic treatment was applied, hydrophobia having been demonstrated by veterinary examination of the animals which inflicted bites or by the inoculation in the laboratory, and in many cases by the death of some other persons or animals bitten by the same dogs. All these persons are, to-day, enjoying good health. In 80 cases the patients received the treatment free of charge.

The persons treated were: From New York, 64; New Jersey, 12; Massachusetts, 12; Connecticut, 8; Illinois, 9; Missouri, 3; North Carolina, 3; Pennsylvania, 3; New Hampshire, 2; Georgia, 2; Texas, 2; Maryland, 1; Maine, 1; Kentucky, 1; Ohio, 1; Arizona, 1; Iowa, 1; Nebraska, 1; Arkansas, 1; Louisiana, 1; Ontario, (Can.), 1.

With kindest regards of the Pasteur Institute.

Paul Gibier.

To Remove Thirst.—Paint the tongues of your fever patients with glycerine; it will remove the sensation of thirst and discomfort felt when the organ is dry and foul.

SOCIETY PROCEEDINGS.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated meeting, September 24, 1890, the vice-president, John B. Roberts, M.D., in the chair.

Dr. Charles B. Penrose read a paper on

The Treatment of Hæmorrhoids by Excision.

My object in presenting this paper is to urge the more general use of Whitehead's operation of excision in the treatment of certain cases of hæmorrhoids.

In 1887, Mr. Whitehead, of Manchester, reported (*Brit. Med. Jour.*, February 6, 1887) three hundred consecutive cases of hæmorrhoids which had been successfully treated by the method of excision and suture. His operation is performed in the following manner:

1. The patient is placed on a table in the lithotomy position, with the hips well elevated.

2. The anal sphincters are then thoroughly paralyzed by digital stretching.

3. The mucous membrane of the rectum is divided at its junction with the skin around the entire circumference of the bowel.

4. The mucous membrane, with the attached hæmorrhoids, is dissected from the submucous tissue, and the cuff or cylinder thus formed is dragged below the skin margin.

5. The mucous membrane above the hæmorrhoids is then divided transeversely, thus removing the pile-bearing area, and the operation is completed by suturing the upper margin of the severed membrane to the free margin of the skin.

The advantages claimed by Whitehead for this method of treatment are based on pathological and on surgical reasons. He considers that internal hæmorrhoids, which are generally regarded as localized distinct tumors, amenable to individual treatment, are, as a matter of fact, component parts of a diseased condition of the entire plexus of veins surrounding the lower rectum, each venous radicle being similarly, if not equally, affected by an initial cause, constitutional or mechanical.

The operation of excision is the only one which removes this whole diseased area. It is, therefore, demanded for this pathological reason. It is, in addition, surgically more perfect than any other method of treatment, because it provides for the readjustment of healthy tissues with the object of securing primary union and rapid convalescence. It does not leave the sluggish ulcer of the cautery, nor is it attended with the pain and slow convalescence of the ligature.

My experience with this operation is limited to ten selected cases. Only those cases were selected in which there existed a complete circle of hæmorrhoidal tumors surrounding the lower margin of the rectum, since for such cases Whitehead's treatment of excision seems to be most particularly adapted.

The details of the operation are simple and easy to execute. In dividing the mucous membrane from the skin it is best to begin at the posterior margin of the anus in order to prevent the blood from obscuring the field of operation. No skin should be sacrificed, even though there appear to be redundant tags around the margin of the anus. The skin always retracts somewhat and the tags shrivel and disappear before firm union has taken place. Failure to observe this rule may result in subsequent serious trouble. Kelsey (*N. Y. Med. Jour.*, October 5, 1889,) reports the case of a woman who had been subjected to a so-called Whitehead operation and who presented herself to him with a complete circle of of excoriated mucous membrane, extending for one inch outside the anus. It is probable that in this case the operator had sacrificed too much skin.

On the other hand, the upper section of the mucous membrane should be made in the same horizontal plane throughout, in order to prevent subsequent ectropion ani.

The dissection of the mucous membrane from the underlying tissue is exceedingly easy, except in some cases of old—or long-standing—piles. The attachment of the submucous tissue is very loose, and separation can be effected with the finger or with the handle of the scalpel. It is not always possible to dissect the piles completely from the underlying structures, as they may involve not only the mucous but the submucous tissues, and in such cases it is necessary to cut partly through the piles until the healthy mucous membrane above is reaced. Repeated attacks of inflammation of course render closer the adhesion of the pile area to the underlying structures. In one of my own cases, where the piles had existed for forty years, and had frequently been inflamed, the adhesions to the two sphincters were so close that a few muscular fibers were cut away during the removal.

The amount of blood lost during the operation is surprisingly small. Whitehead states that he has often operated on severe cases, and not found it necessary to twist a single vessel. In five of my cases no hæmostatic was necessary. Bleeding is avoided by adhering closely to the mucous membrane in the dissection, as the larger arterioles lie beneath the submucous tissue. The arterial bleeding occurs in those cases of old piles which have been subjected to previous operation or to attacks of inflammation, and in which dilatation of the rectal and anal arteries has taken place secondary to dilatation of the hæmorrhoidal veins. The bleeding from the upper divided edge of the mucous membrane can be reduced to a minimum by following Whitehead's method of inserting the sutures as each portion is divided, or by adopting Marcy's plan of introducing a circle of shoemaker stitches of catgut around the mucous membrane above the piles before cutting the mass away.

Whitehead's advice is in all cases to remove the complete cylinder of mucous membrane, whether or not the whole of this area appears to be diseased. He gives this advice for the reason which I have already stated, that he considers the individual piles as but part of a general pathological condition, involving all the lower hæmorrhoidal veins of the rectum.

Whether we accept this pathological view or not, it is best to follow this plan, and to make a complete circular division of the mucous membrane, as by this method the best surgical results are obtained, and ectropion ani prevented. I have seen a case in which only one-half of the circumference of the mucous membrane of the rectum was removed, and in a few hours after the operation an œdematous swelling formed in the other half, which has now resulted in a hæmorrhoidal tumor almost as annoying as the one for which the operation was performed.

In attaching the mucous membrane to the skin, Whitehead uses the interrupted silk suture. He never removes the sutures, but allows them to ulcerate through—a process which is very easily accomplished. In my own cases I have used the continuous catgut suture.

The treatment of these cases after operation is very simple. It is rarely necessary to use opium or the catheter. An opium and belladonna suppository introduced immediately after the operation, is in most cases all that is required. The bowels can be moved in from twenty-four hours to four days, and with very little pain. Absence of pain after Whitehead's operation is due to the thorough paralysis of the sphincters, and to the fact that no source of irritation is left beyond that of a clean linear incision, united without tension and without strangulation of tissue.

A glance at the histories of my own cases shows that they were all cases of aggravated hæmorrhoids, in which the piles covered the whole circnmference of the lower part of the rectum. In all the cases the disease had existed for many years, and two had been subjected to previous operation by the ligature.

In only one case was there anything like free bleeding during the operation.

In all the cases a suppository of ½-grain of extract of opium and ½-grain of extract of belladonna was introduced immediately after the operation, and this was all the opium required except in three cases, in which 1/6-grain of morphine was subsequently administered.

The catheter was used in only three cases, and in these for a period not longer than 24 hours. The length of time that the case is confined to bed depends to a great degree upon the social standing and the disposition of the patient. In my cases it varied from 2 to 10 days. Every case should be able to sit up in 4 or 5 days, and to resume work in 10 days or 2 weeks.

The bowels were opened without pain in from 24 hours to 4 days after operation.

No complications of any kind followed these operations. Union takes place quickly, and generally one dressing, taken off when the bowels are moved, is all that is necessary. In no case was there incontinence from paralysis of the sphincter, or any tendency to stricture, from contraction of the scar.

Since the publication of Whitehead's paper his method of operating bas heen tested by many surgeons. The operation cannot be criticised on surgical grounds, as it is certainly the most perfect plan of treatment, surgically speaking, which has been proposed..

The immediate removal of the tumors, the coaptation of healthy tissues, and primary union, are substituted for slow strangulation by the ligature, or removal by the cautery and healing by granulation.

The applicability, or the necessity, of this operation in all cases of hæmorrhoids, is, however, open to criticism. If we accept Whitehead's views in regard to the pathology of pils, and believe that the whole venous plexus surrounding the anus and the lower end of the rectum, is in a pathological condition in every case of hæmorrhoids, even though there may be present only one ar two isolated tumors; then, of course, the complete removal of this area is indicated.

But, that this view is not true is proved by the thousands of cases which have been permanently cured by the ligature and the clamp. The method, however, is indicated in all cases of aggravated hæmorrhoids where the vascular tumors cover the whole or the greater part of the circumference of the bowel. In such cases the operation presents no great difficulties. Statistics show that it is at least as safe as operation by the ligature or the clamp, and it is certainly followed by a more rapid convalescence, and much less pain and discomfort.

Discussion.

Dr. W. D. Green.—I have had the pleasure of witnessing only a small number of Whitehead's operations, but I fully agree, and I think that those who have tried the operation will fully agree with Dr. Penrose, that the method of excising through the whole circumference of the bowel, the pilebearing mucous membrane and drawing down upon the upper segment and then attaching this to the lower segment without including the skin, has the advantages, first, of removing all posibility of return of the trouble; and, secondly, as Dr. Penrose has stated, in making a clear, clean, linear incision around the circumference of the bowel. Nearly all of us have seen the immense amount of suffering which the older operations by means of the clamp and ligatures, and even the cautery, have entailed. In the cases of the new operation which I have seen, recovery has been rapid and complete. In one case, that of a woman well advanced in life, upon the day after operation, when I got to the house, I found her comfortably seated in a rocking-chair.. The physician who had had the case in charge before the operation had given her freely of some medicine to open the bowels, and on the morning after the operation, without any pain and without any tenesmus, she had a large, well-formed motion. In the old method, in which for days the physician was called upon to administer opium, either by suppository or hypodermically, in large amounts, and in which the patient and the physician both looked forward with dread to the time—5, 6, or 10 days after the operation—when the bowels where to be opened, is by this method entirely obviated.

I have seen, in the few cases which I have watched,

no pocketing or trouble about the line of incision. The two freshly cut surfaces unite very quickly—very much more so, it seems to me, than in mucous surfaces elsewhere. Even when the bowels were moved within 24 or 35 hours, I was surprised to find that there was no trouble.

It strikes me that the continued suture has advantages over the interrupted. Being introduced and made fast at one point, and then carried out and in around the circumference of the bowels, if catgut be used at the time when union usually occurs the suture is probably dissolved and passes away without any trouble; or, if silk be used, by simply introducing the scissors and cutting close to the knot and giving an easy pull, the whole suture is removed without any pain or bleeding.

I must confess that the operation presents to me by far the best method of removing the pile-bearing membrane when it exists and involves one-half or more than one-half the membrane around the circumference of the bowel.

SOCIETY NEWS.

SOUTHEAST MISSOURI MEDICAL ASSOCIATION.

The prospects for a very successful meeting of this progressive society at Bismarck, November 11, 12 and 13, are most flattering. Dr. J. J. Norwine, the president, has been doing good work in arousing the interest of the profession of Southeast Missouri to the necessities of united efforts towards the advancement of the interest of the profession of this district; and his labors have borne fruit in the production of the following attractive programme:

Meeting called to order by the retiring President, L. T. Hall, at 7:30 P.M.

Prayer, by Rev. Mason.

Address of welcome, by D. L. Rivers.

Music.

Response, by Dr. Goodykoontz.

Music.

President's Annual Address.

Reception of new members.

Address to the Society, Dr. W. B. Outten, of St. Louis Mo.

Address to the Profession, by Dr. H. Tuholske, of St. Louis, Mo.

Music.

Adjournment.

PAPERS.

Typhlitis, Dr. L. T. Hall, Potosi, Mo.

Rheumatism, Dr. R. T. Henderson, Jackson.

Causes and Prevention of Puerperal Eclampsia, Dr. Nifong, Fredericktown.

Summer Diarrhœa in Infants, Dr. F. W. Lowry, Iron Mountain.

Purulent Ophthalmia, Dr. A. A. Bondurant, Charleston.

Consultations of Physicians, Dr. O. Haley, Fredericktown.

Administration of Damanna, in Sciatic Rheumatism, Dr. W. P. Newman, Coffmann.

Child Bed Fever, Dr. B. R. Hempstead, Egypt Mills.

There is Danger in Teaing and Feeding Infants, Dr. J. H. Ferguson, Mine La Motte.

Summer Diarrhœa, Dr. E. R. Harris, Shawneetown.

Malarial Hepatitis, Dr. G. W. Vinyard, Jackson.

Antiseptic Dressings, Dr. W. F. Grimstead, Charleston.

Calomel, Dr. C. M. Witmer, Marble Hill.

Typhoid Fever, J. M. Rowe, Charleston.

SELECTIONS.

INSOMNIA.—ITS CAUSES OR CONDITIONS.

Dr. Chas. F. Folsom (*Bost. Med. and Surg. Jour.*) defines the causes of insomnia in the following conclusions:

1. The perverse habit of sleeplessness, a result of years, perhaps generations, of misuse of body and brain, I hardly need mention; and scarcely more the habits formed to induce sleep, as regards light and darkness, noise or stillness, idiosyncrasies of position, temperature, etc. These people always are amazed to see how much can be done to form the habit of sleep; what fair sleepers they may finally become by the proper kind of training.

2. Insomnia from external causes, through the various senses, excluding habit, naturally includes the obvious natural sensations of heat, cold, pain, hunger, light, noise, etc.

3. Excessive intellectual or emotional activity, including strain, excitement—pleasurable or distressing—grief, fear, worry, anxiety, etc., if sufficiently intense or prolonged. Naturally, as elsewhere, excess is only a relative term in different individuals, or in the same individual under different conditions. With the forced overaction of the brain the nervous discharge, as time goes on, requires greater stimulation until such a degree of exhaustion and instability is produced that any natural function, even rest or sleep, for a time becomes fragmentary, insufficient, or almost impossible.

4. Of the reflex causes of insomnia, indigestion, gastric or intestinal, is by far the most common, and it may fail to be indicated in any of the usual ways. As in persistent headache, a cause may be discovered only after repeated experiment in withdrawing one article of food after another, until the offending one is found. Genito-urinary and pelvic disorders come next, with unlimited possibilities thereafter.

5. The traumatic antecedents of insomnia are purely physical, from a sudden fall or blow, for instance; psychical, as a violent mental shock; or both, such as occur in railroad accidents, etc. In these cases there is evidently a wide difference in the degrees of injury to the

brain. The impression may be transient and result in restoration to healthy function. It may consist, in almost any degree, slight or great, of disarranging, decomposing, decompounding of cerebral molecules and cells, possibly of association-tracts, sometimes resulting, as Westphal held, in minute patches of sclerosis.

6. The auto-toxic sources of insomnia in acute diseases need only bare mention; in chronic disease, gout, lithæmia, rheumatism, tuberculosis, syphilis, malaria, leukæmia, and chronic nephritis, there is a similar cause independent of any cerebral exhaustion or impaired nutrition which may be produced by them. Probably much at least of the sleeplessness from habitual constipation belongs in this category. I have often found persistent wakefulness an early symptom of some general disease, especially acute rheumatism and arterio-sclerosis, many months before an absolute diagnosis became possible.

The habitual excessive use of tea, coffee, tobacco, alcohol, morphine, chloral-hydrate, bromides, cocaine, or other drugs, is a fruitful toxic source of insomnia. Chronic poisoning from arsenic and from lead, perhaps often by leading to vaso-motor disorders, degenerative disease, and arterio-sclerosis, without the usual symptoms, must not be overlooked.

7. Exhaustion from wasting diseases and enfeebling conditions, pulmonary consumption, anæmia, starving, profuse and repeated hæmorrhages, sexual excesses, impaired nutrition of the brain from either deteriorated quality or diminished quantity of its blood-supply.

8. Of vascular origin, from hepatic disease, producing venous stasis, from cardiac and renal diseases with increased vascular tension; from asthma and hypertrophied or dilated heart, producing cerebral hyperæmia, anæmia or venous engorgement; from arterio sclerosis, especially that of old age. Exaggerated or insufficient blood supply to the brain, venous stasis, increased vascular tension, may also arise from syphilitic disease of the blood vessels, or from disorders of digestion or of the portal system, and be as fertile a source of insomnia as the disturbances in the circulation in women at the menopause and other critical periods in life, including puberty, pregnancy, childbirth and lactation. Here also there may be disordered innervation, as well as disturbed vascular tension and, perhaps, nutrition, such as we often see in less degree during menstruation.

9. Vaso motor.—In that marvel of scientific research and profound medical knowledge, Meynert's *Erkrankungen des Vorderhirns*, the author repeats a statement previously made by him, that the nutrition and the *Erregbarkeitsverhaltnisse* of the brain depend upon its relative weight, as compared with the weight of the heart. The blood-pressure, however, is naturally not governed solely by the heart and cardiac innervation, but by the resistance which the cerebral capillary vessels offer by virtue of their vaso-constrictor nerves, thus bringing in the higher automatic vaso-motor centers of the cortex, which are subject also to psychical influences, and the reflex vaso-motor centers in the pons and medulla as well as the association-tracts, the reflex vaso-motor centers of the spinal cord acting only co ordinately or subordinately.

This field of study is too broad to be entered upon understandingly in the present state of our knowledge. That vaso-motor paresis constitutes an important features of the prodromal period of diffuse cortical encephalitis, and probably of other organic disease, as well as in the neuritis of lead and arsenic, must, I think, be admitted. The theory that there is a disease which is essentially of the cerebral vaso-motor centers, involving, perhaps, the association-tracts and the spinal reflex centers, is one in favor of which much can be said, especially where the symptoms appear rather abruptly in people in otherwise good health, without marked emotional or other exhaustive antecedents, and where the least mental or physical effort produces marked cerebral and spinal hyperæmia. How far vaso-dilator nerves act in such cases is a matter of doubt, the transient or more or less persistent anæmia and hyperæmia of the brain and cord being explained by excess of functional activity or inhibition of function in the vaso-motor centers.

10. The neurasthenic condition, in exalting the direct and reflex excitability of the nervous system, naturally intensifies the usual causes and conditions of insomnia, the unusual sources of insomnia in neurasthenia, in my experience, being astigmatism and hallucinations of sight or hearing. The eye-strain from astigmatism is often in health unnoticed, when in states of debility it produces headache, dizziness, spasmodic muscular action or wakefulness.

An hallucination of sight occurring a single time is not uncommon in people in reasonably good health. Frequently repeated, such hallucinations are less rare than is supposed without any indications of mental or other disease. Occasionally, like flashes of light, they are precursors of headache. I have observed frequent hallucinations of hearing once, independent of insanity.

If of a distressing nature, hallucinations of sight and hearing may be a fruitful source of insomnia. They occur beyond the power of the will of the individual to call them up, although sometimes able, under some conditions, to cause them to disappear. The hallucinations of sight constitute new arrangements of mental impressions which can be more or less clearly recollected, or they form combinations which seem entirely new. Once I found two sisters subject to them, and once two sisters, a cousin and a common grandmother—curiously enough, the different members of the families not knowing each other's peculiarities, which, however, were quite different in kind, until I began my investigations. They had thought them uncanny and had concealed them.

11. The neuropathic temperament, usually by inherited predisposition, but which may be acquired. In its pronounced form it is closely allied to the well-marked functional diseases of the nervous system, and at the critical periods of life, may readily develop into them.

It is congenital, or due to early interference with the normal development of the brain, to faulty training, and to bad habits of living. It shows itself in infancy and childhood by irregular or disturbed sleep, irritability, apprehension, strange ideas, great sensitiveness to external impressions, disagreeable dreams and visions, romancing, intense feeling, periodic headache, muscular twitchings. There are often excessive shyness, introspection and self-consciousness, or extreme self-assertion or conceit. The imitative and imaginative faculties may be quick, the emotions strong, the affections intense or almost absent. The natural feelings easily become disturbed and perverted. The passions are unduly a force in the character, which is commonly said to lack will-power. Self-discipline is a mighty task, and self-control is acquired only with great difficulty. The memory is now and then phenomenal. There is a ready reaction to external circumstances, even to the weather, by which the individuals become easily a little exhilarated or somewhat depressed. They are apt to be self-absorbed, and may be suspicious or morbidly conscientious. Slight physical ailments, hardly noticed or rapidly recovered from in sound constitutions, leave on them a long or lasting impression. They readily become neurasthenic, hypochondriacal, or nervous invalids, so-called, and they break rules or disregard established customs with less cause or provocation than other persons. They lack stability, or have in special directions narrowed limitations of intellectual energy, in quality or quantity. To the nervous temperament there may belong social and intellectual gifts and graces, originality, intensity, poetry, art, philanthropy. Adjusting skill, the ability to adjust their organism to their environment, to use Herbert Spencer's phrase, is often lacking.

Many of these people have the marks of Morel's *degeneres*, with few compensations; many illustrate that marvelous law of compensation in Nature for defect in one direction by accomplishment in another. Often not only they, but generations before them, have been crammed mentally and emotionally but starved in other ways, their very abstemiousness producing a tough asceticism, requiring decades before the final but sure physical deterioration; or there may be a a gouty diathesis, and the somewhat opposite temperaments (or perhaps constitutions) may be combined by intermarriage. They fail to store up nervous energy; they are unable to inhibit the free or excessive or explosive discharge of it in response to inconsequent excitations, and they are constantly in the position of having expended more than their reserve nervous force. From the prominence in adult life of the unstable emotional centers which predominate in childhood, they are most difficult to treat. Most of them are insomniacs, more or less—to quote one of the most gifted and graceful of them. We can no more relieve them of all of their symptoms than we can add a cubit to their stature. But there are none in the community for whom we can do more, as there are none to whom alluring promises, including mind-cure, faith-cure, hypnotism, etc., are more sedative.

12. Wakefulness is one of the most difficult symptoms to treat in the various stages of many forms of mental disease, and it is doubtless only an early symptom in many cases where it had been regarded as a cause. In hysteria, hypochondria, and organic diseases of the spinal cord and brain, including hæmorrhage, embolism and thrombosis, insomnia often taxes our utmost resources.

13. As a form of insanity—that is, as an interchangeable psycho-neurosis in families predisposed to mental disease—insomnia is not very uncommon, especially among Morel's *degeneres*. In such case it is persistent for months or years, is attended with great mental and physical exhaustion from slight effort, and is most intractable to treatment. It usually ends in more or less permanent mental enfeeblement with impaired will-power and diminished self-control, perhaps without, but generally with, other psychical symptoms.

PATERNAL IMPRESSIONS.

BY F. D. BULLARD, A.M., M.D., LOS ANGELES.

Read before the Alumni Association of the College of Medicine of University of Southern California.

Maternal impressions are firmly believed in by most of the laity, and too have been the theme of many a medical writer. For which reason I believe it my duty to come to the rescue of the despised father and to show that he also is capable of making impressions. I think the obscure place he now occupies is partly due to his inherent modesty. Paternal impressions may be divided into two great classes; ante partum and post-partum. The latter kind is so very common that mere mention is sufficient. That, however, there is such a thing as paternal impressions upon the embryo is an undoubted fact. It is, for example, well authenticated that a woman by a second husband, will have children like in body and mind to the first, e. g., a white woman, whose first husband was a negro, has been known to have mulatto children by a second and white husband.

Not only is this so, but the child in utero may have a remarkable effect on the father, he developing unnatural tastes, such as for Limburger cheese, onions, slate-pencils and boarding house hash. Again, not rarely the husband has regular morning sickness—nausea and vomiting—the wife being either well or sick in sympathy. Quite frequently the husband is heard to remark on slight provocation. "It makes me tired," or "It makes me sick."

We will quote but three cases to the point.

Case I.—Mr. P. Q. L. R., æt. 30 years, primogener, became sick suddenly, about a year after marriage, wife apparently well, morning sickness continued for three months, wife delivered six months later of a healthy child.

a reliable test of the state of the implicated organ and the value of a means of diagnosis on which we may trustfully base the therapeutics that shall be pursued. The essence of this resource is the determination, by practical examination, of the presence, absence, or proportional amount of free hydrochloric acid contained in the secretion of the stomach, it being now clearly proven by a very large number of careful observations that in cases of cancer the acid in question is either altogether absent or forms but a small portion of the contents of the organ, in comparison with the amount which normally should be present. On the other hand the amount of free hydrochloric acid in cases of simple gastric ulcer is often considerably in excess over the proportion existing under conditions of health; and it very rarely diminishes; and the constancy of this relation is such as to confirm the earlier opinions which obtained respecting the etiology of this form of ulceration. It need hardly be insisted on that the determination of these relations could only be possible with the help in arriving at conclusions respecting the dependence of cause and effect that is given by the improved methods of observation introduced by the modern advance of scientific medicine. Among them, modes of investigating the condition of the stomach occupy a prominent place; they include direct examination of its interior through a tube illuminated by an electric lamp; gastrodiaphany, a method of determining the size and contents of the organ with the aid of an incandescent lamp attached to the end of a soft rubber stomach tube, which is inserted in the ordinary way, and which by lighting up the interior of the cavity permits its outlines to be distinguished when the observation is carried out in a darkened chamber; measurement of the capacity of the organ by the injection of fluids or of air into it may also be resorted to,or it may be similarly distended by introducing into it successively, by the mouth, bicarbonate of sodium and tartaric acid, when the evolution of carbonic acid gas fulfils the same end, a plan that Frerichs has adopted with success. There remains to mention, too, the proceeding by which portions of the gastric secretion are withdrawn for chemical examination, whereby the degree and nature of their acidity may be directly made out, and thus an immediate conclusion arrived at concerning the morbid processes at work within the organ.

Of the comparative merits and availability of the various plans here mentioned it is perhaps unnecessary to say much, unless it be to point out the superiority of that which enables the character of the secretions to be determined, since it is this kind of information that yields the necessary guide to remedial measures most likely to prove beneficial under the special circumstances observed. Of the method of direct examination of the stomach walls several competent authorities speak in condemnatory terms; and it is probable that the dangers incurred by its adoption are incommensurate with the value of the results secured by it, particularly since less objectionable means may be adopted for arriving at information at least as useful and complete. Of the other measures that commend a resort to them under suitable conditions, but that which confers a knowledge of the state of the secretions in regard to the presence of hydrochloric acid may be at once accepted as being an indispensable aid in the diagnosis of gastric disease.

A valuable communication was recently read before the Association of American Physicians at the annual meeting at Washington, the author of the paper, Dr. Kinnicutt, citing several cases in illustration of his method. In this essay the value of this particular means of diagnosis is clearly demonstrated; but it is also shown that an absolute increase of acidity does not always occur in cases of simple ulcer, though these are not, like cancer, found in association with absence of hydrochloric acid. Rather, the conclusion Dr. Kinnicutt arrives at is, that the presence of free HCl in cases of gastric ulceration found on repeated examination of the gastric contents, strongly points to the non-cancerous character of the lesion; and in practice it cannot be doubted that this means of diagnosis will afford most valuable assistance.—*Med. Press and Circular.*

Phthisis Victa.—The imperishable fame already achieved by Professor Koch through his discovery and demonstration of the bacillus of tubercle, will ensure that his name shall live whenever the study of pathology is cultivated. Great, however, as are the benefits this brilliant investigator has already conferred upon humanity, they bid fair to be eclipsed by the yet more precious gift which he bids us to hope for at his hands, a means, namely, of destroying the bacillus when it has effected an inroad in the tissues of the body, and of thus preventing the disastrous results associated with its maleficent activity in the organisms of its victims. At the recent Berlin meeting of the International Medical Congress, one of the principal and most interesting addresses was that on Bacteriological Research, delivered by Professor Koch, and it was in this communication that the prospect of relief alluded to above was held out to mankind. After alluding to the germicidal influence of a large number of substances experimented on with a view to determine their power to check the development of bacilli, and having expressed the regret he experienced on finding that, though thus effectual in preventing the growth of bacilli in cultivated preparations, they were yet without effect if tried on tuberculous animals, the orator proceeded to make the cheering statement that his efforts had at last terminated in the discovery of a substance which has the power of preventing the growth of tubercle bacilli, not only in a test tube, but in the body of an animal. At the present time the research on which this statement is based is not fully completed, and with the humility of true genius, its author tendered to his hearers an apology for mentioning a matter which, in his own mind had not been completely settled. The occasion, however, was one to call for some little departure from conventional usage when the question to be discussed was one

of such vast importance to the whole human race; and none will be found to cavil at the generous impulse which led the greatest of modern bacteriologists to disclose his highest triumph a little prematurely. His own fervent words are: "Should the hopes based on these researches be fulfilled in the future, and should we succeed, in the case of one bacterial infectious disease, in making ourselves masters of the microscopic, but hitherto victorious, enemy in the human body, then it will soon also be possible, I have no doubt, to obtain the same result in the case of other diseases. This opens up an oft-promised field of work with problems which are worthy to be the subject of an international competition of the noblest kind."—*Medical Press and Circular.*

New Treatment of Tuberculosis by Vaccine Method.—On November 19 last, Drs. J. Grancher and St. Martin addressed to the Academie de Medecine a sealed packet relating to a method of treatment and preventive inoculation of tuberculosis based upon numerous experiments which they had made on rabbits. The communication made by Dr. Koch to the Berlin Congress concerning the results which he has obtained in rendering guinea-pigs refractory to tuberculosis, or in curing them of advanced forms of tuberculosis, has induced MM. Grancher and St. Martin to make known their researches on the same subject earlier than they would otherwise have done. In all these experiments they chose the rabbit as the subject of inoculation, and intravenous injection, because there is thus produced a tuberculosis which kills very quickly, and at an almost fixed date, with constant lesions of the liver, the spleen, and the lungs, and which defies all local treatment. Tuberculosis thus induced being always fatal, a solid basis is thus secured which allows exact appreciation of the negative or positive results of any method which tends to produce the refractory state or to cure after infection. The method employed by MM. Grancher and St. Martin was the injection of tuberculous cultures attenuated in various degrees, and used like the dried spinal marrow in Pasteur's treatment of rabies and hydrophobia. Nine degrees of attenuation have been obtained, the four last being such that the cultivations remained sterile. The injections were made first with the most attenuated cultivations, and then with more and more virulent ones. The authors consider that by this method they have succeeded, on the one hand, in conferring on rabbits prolonged resisting power against the most certain and the most rapid experimental tuberculosis, and, on the other hand, in conferring an immunity against that disease, the duration of which remains to be determined.—*Brit. Med. Journal.*

The Civil, Military and Naval Departments of the British Government are supplied with the Fairchild Digestive products and the Fairchild preparations for the predigestion of milk, etc., especially preferred in India.

USEFUL FORMULÆ.

Pruritus Vulvæ.—

℞ Sodium hyposulphite, - - ʒiijss.
Carbolic acid, - - - - gr.xxx.
Glycerine, - - - - - ʒij.
Water, - - - - - - ℥iijss.

S.: To be applied locally.—*Buffalo Med. and Surg. Jour.*

The following formulæ are taken from the *Times and Register:*

For Recent Bruises.—

℞ Potas. chlorat., - - - - - ʒss.
Tr. iodi,
Aquæ, - - - - - - aa f℥ss.

M. S.: Apply locally.—Brensinger.

For Cholera Morbus.—

℞ Magnesiæ pond., - - - ʒij.
Sp. ammon. arom., - - fʒjss.
Aq. menth pip., - - ad fʒiij.

M. S.: Dose, one to four drachms; repeated every hour till relieved.—Gubbins.

Anodyne Lotion.—

℞ Morphinæ sulph., - - - gr.ij.
Liq. plumbi subac., - - - fʒij.
Tr. lavand. c., - - - - fʒj.
Aquæ, - - - - - ad f℥ij.

M.—Barker.

For Internal Hæmorrhoids.—

℞ Atropinæ sulph., - - - gr.j.
Tr. ferri chlor., - - - gtt.xxx.
Vaseline, - - - - - ℥j.

M. S.: Apply locally.—Laplace.

Cough Mixture.—

℞ Morphinæ sulph., - - - gr.ss.
Acid sulph. dilut., - - - gtt.xj.
Syr. tolu., - - - - - fʒj.
Syr. ipecac., - - - - - fʒj.

M. S.: fʒj after meals and at bedtime.—Dorr.

For Chronic Bronchitis in a Fat, Plethoric Woman.—Dry diet; free purgation; atomization of fluid cosmoline one ounce, with chronic acid, one grain; and the following pill, to be taken every four hours:

℞ Strychninæ sulph., - - - gr.$^1/_{20}$.
Ergotinæ (ext. aq.) - - - gr.ij.
Hydrastinæ, - - - - gr.ij.

M.—Waugh.

For Gleet.—

℞ Aristol, - - - - - - ʒss.
Fluid cosmoline, - - - - fʒij.

M. S.: Half a drachm to be injected through a soft rubber catheter passed in to the tender spot in the urethra.—Waugh.

ORIGINAL ARTICLES.

THE TORSION OF ARTERIES FOR THE ARREST OE HÆMORRHAGE.

BY J. B. MURDOCH, M.D., PITTSBURG, PA.

Read before the Mississippi Valley Medical Association at Louisville, Ky., October, 1890.

There is no subject of greater interest to the practical surgeon than the arrest of hæmorrhage.

This remark is equally true whether the hæmorrhage comes from a wound accidentally inflicted, or one made intentionally by the surgeon's knife.

Without the means of stopping the flow of b ood from bleeding vessels, the surgeon's art would be greatly crippled, and surgical operations, where blood vessels must be divided, would be impossible.

There is no sight so appalling as a formidable hæmorrhage. When a large artery is opened, the blood gushes out in an angry stream, the face becomes pale, the color leaves the lips, the respiration becomes sighing, the heart fails to beat, and death closes the scene. Without any knowledge of the circulation or nature of the blood, or of the means by which its flow from a wound could be arrested, what a terrible and mysterious sight it must have been to the early races of men to see one of their number perish from hæmorrhage. What, for instance, must have been the sensation of our first parent, Adam, as he looked upon the wounds of his dead son, Abel, with the stain of his blood upon the ground.

Surgeons from the earliest ages have shared with the people this dread of hæmorrhage, and have ever been striving for the best means for its control.

Upon no subject has our profession been more conservative than upon this one—the arrest of arterial hæmorrhage.

Since the time of Celsus, notwithstanding the numerous methods which have been proposed for this purpose, but two, viz., the actual cautery and the ligature, have received the endorsement of the profession.

But, if the profession has been slow to endorse new methods, its confidence once gained has been most unwillingly surrendered.

From the time of Archigenes, who practiced in Rome shortly after the time of Celsus, up to the time of Richard Wiseman, Sergeant-Surgeon to King Charles II., the red-hot iron was the sole method employed.

Thus, this method of checking hæmorrhage after amputation not two centuries ago, was the same as that used for fifteen hundred years previous. The pertinacity with which surgeons adhered to the use of the actual cautery after Pare's great discovery of the ligature, well illustrates the fear in which surgeons stood of hæmorrhage. They have used, and had seen their fathers use, the red-hot ron, and, notwithstanding the pain it causes and the interference with primary union, they were unwilling to discard the agent which long usage had taught them was successful.

In 1564, Ambrose Pare published his new discovery, which, to use his own language, "was taught him by the special favor of the sacred Deity." In this publication, as is well known, Pare demonstrated the value of the ligature as a hæmostatic. But, owing to the extreme fear of hæmorrhage, and the criminal neglect of surgeons, it was two hundred years before it was adopted by the profession, and then it came into favor through the influence of Sharpe, one of the surgeons of Guy's Hospital, London, who boldly championed the claims of the ligature to popular confidence.

Since this time nothing has dislodged the position which the ligature has held as a hæmostatic in the opinion of the profession.

The efforts made by Sir James Y. Simpson, of Edinburgh, to substitute acupressure, and the still more recent endeavor of Dr. S. F. Spier, of Brooklyn, to substitute constriction for ligation, have most signally failed. The same statement may be made also in regard to torsion as a means of arresting arterial hæmorrhage. It has not received the support of the profession to any extent, but unlike the other rivals of the ligature, it has had champions for hundreds of years, and still holds a place as a valuable means of arresting hæmorrhage. This subject has received but little attention by modern surgeons. The twisting of an artery to arrest bleeding is of ancient origin. It is spoken of by Celsus. A fact often observed that an arm or leg may be torn from the body with the loss of only a few drops of blood, no doubt suggested the method. It has been advocated by such surgeons as Mussat, Dieffenbach, Schroeder and Syme. But the credit of bringing it prominently before the profession and establishing its efficiency is due to Mr. Bryant, the present distinguished surgeon of Guy's Hospital, London. At this hospital the ligature is seldom used, torsion being chiefly relied upon. Mr. Bryant tells us in the last edition of his Surgery, that in two hundred consecutive amputations of the thigh, leg, arm and forearm, all of the arteries were twisted, 110 of them being the femoral artery, and that in no case was there secondary hæmorrhage.

Mr. Bryant says: "The physiological arguments in favor of torsion are very great, and the practical advantages seem to be no less. After seven years' experience in its practice, applied to vessels of all sizes, the femoral being the largest, I have had no mishap. I have observed that wounds have united more rapidly and kindly, primary union being the rule. There has been less constitutional disturbance after operation, and consequently, less liability to traumatic fever, pyæmia, and other complications such as we are all too familiar with in the practice of surgery. I have had stumps heal in a week, and the patient up in two weeks, without a single drawback, rapid and uninterrupted convalescence following the operation."

Having given this experience of Mr. Bryant, I desire now to give my own as observed at the Western Pennsylvania Hospital of Pittsburgh. At this hospital, torsion is almost exclusively relied upon to check the hæmorrhage from wounded arteries or veins, whether the wound be produced by surgeon's knife or otherwise. My experience with torsion as a hæmostatic dates back to the year 1872, when I became a member of the hospital staff. My colleague had, previous to my connection with the hospital staff, been twisting arteries as large as the radial and ulnar. The facility with which this was done, and the fact that the wounds healed kindly and without secondary hæmorrhage, induced me to follow their example, at first timidly, but with success came confidence. Having been successful in the amputation of a forearm with no untoward result, I ventured next to twist the brachial after the amputation of an arm; soon after this the axillary, and then the popliteal, and finally the femoral. And now, for the past eighteen years, torsion, for the arrest of hæmorrhage after all surgical operations, has been the recognized, and almost the only, method resorted to at this hospital. It is to be regretted that records have not been kept of the number of large arteries which have been twisted to arrest the hæmorrhage.

The following is a table showing the number of arteries divided in cases of amputation, where torsion has been resorted to for the arrest of hæmorrhage at the Western Pennsylvania Hospital:

Femoral,	116 times.
Popliteal,	18 "
Axillary,	18 "
Anterior tibial,	317 "
Posterior tibial,	317 "
Brachial,	81 "
Radial,	45 "
Ulnar,	45 "

There are two methods by which the torsion may be applied:

1. Limited torsion; and
2. Free torsion.

In the first method, two pairs of forceps are required. The first pair grasps the vessel at its cut extremity, and pulls it from the sheath. It is then seized by the second pain at a point from one-half an inch to an inch above the cut extremity of the artery, this second pair being held at right angles to the long axis of the vessel. The first pair is then given three or four sharp turns.

By the second method (free torsion), only one pair of forceps is required. It is the one recommended by Mr. Bryant as not being so likely to injure the external coat of the artery. And this is the method which was adopted in the cases which I have given.

A good pair of forceps is required which will hold the end of the artery firmly, that has no lateral motion and with serrations blunt enough to obviate any laceration or cutting of the parts seized by the blades. The vessel should then be draw out as in the application of the ligature, and three or four sharp rotations of the forceps made. In large arteries, such as the femoral, the rotation should be repeated till the sense of resistance has ceased. The ends should not be twisted off. In small arteries, the number of rotations is of no importance, and their ends may be twisted off or not, as may be preferred. In all of the cases mentioned in the above table, torsion of the arteries and veins, was the method resorted to to control hæmorrhage.

In addition to these cases, of which we have a record, the method of torsion has been the one resorted to in all other surgical operations performed during this period, such as amputations of the female breast, the removal of tumors, the excision of joints, etc. It is within bounds to say that torsion has been resorted to at this hospital in thousands of cases without any mishap. We have had no case of secondary hæmorrhage which could fairly be attributed to the method of controlling the hæmorrhage.

The advantages of torsion as compared with ligation are:

1. The greater facility with which it can be applied.

I am fully aware that this proposition is disputed, but to those who are familiar with both methods, there can be no doubt that torsion is the easier of the two. For the ligation of an artery, an assistant is required to seize the vessel and draw it out while the ligature is applied. For torsion, the surgeon requires no assistant. The vessel must be seized by the forceps in either case. In torsion, it only requires three or four turns of the forceps to complete the process, which can be accomplished in as many seconds. When a ligature is applied, let the operator be ever so skillful, the thread may break or slip off the vessel, but if neither of these accidents occur, the process cannot be accomplished in anything like the same time.

2. Torsion is a safer method, being less liable to be followed by secondary hæmorrhage.

This proposition has been absolutely proven by the experience in the use of torsion at Guy's Hospital, London, and I have now given additional proof by the experience given in this paper.

3. Healing is facilitated because the wound is free from any irritating or foreign body.

This proposition is so plain that it should not require an argument. It was true before the antiseptic treatment of wounds had come into such general use, but is doubly so now. The catgut ligature is no doubt a safer ligature than the silk, for it does not require an ulcerative process for its discharge, and when this ligature has been made thoroughly antiseptic, it is no doubt the best. But a ligature rendered thoroughly antiseptic is not always at hand, and those surgeons who have had most experience with the antiseptic treatment of wounds will, I think, be the first to admit that, in spite of their most careful attention, septic germs are often introduced into the wounds by means of the ligature. Even after every precaution in preparation and preservation, the handling of a ligature in its application is a frequent source of infection.

But there are other objections to its use. The catgut ligature may dissolve before the artery has become closed by the natural hæmostatic process, or it may unbind. Both of these accidents have been the frequent cause of secondary hæmorrhage.

On a recent visit to some of the principal hospitals of New York City, where the operators and assistants possessed the greatest skill, I was not surprised to see that in many instances a ligature broke, and in other cases slipped off the vessels before they were secured. This was to me exceedingly annoying to witness, when I knew that the vessels could have been so easily twisted while they were in the grasp of the forceps. When the question was asked one of these operators, a distinquished surgeon: Why don't you resort to torsion? the reply was, "we are afraid to trust it." This answer might have been given with equal force by Richard Wiseman in the 17th century, when asked why he did not resort to the ligature instead of the red-hot iron.

In a matter so important as the arrest of arterial hæmorrhage, it is proper that surgeons should be conservative, but there is such a thing as pushing conservatism too far. In the torsion of arteries, I claim we have an improvement upon ligation; its claims for recognition rest upon physiological arguments, which cannot be shaken, and its reliability as a hemostatic has been proven by abundant experience.

Before closing this paper, let me say that I have already presented this subject to the profession at St. Louis, before the National Association of Railroad Surgeons, May 2, 1889.

I have taken the liberty to quote freely from that address.

I now desire to state that I reiterate all the opinions expressed at that time.

Increased experience only confirms me in the truth of the statements.

PROFESSOR FLINT'S DOCTRINE OF THE SELF-LIMITATION OF PHTHISIS.

BY WM. PORTER, M. D.,

Professor of Laryngology and Diseases of the Chest in the St. Louis College of Physicians and Surgeons; Fellow of the American Laryngological Association; Ex-President of the Mississippi Valley Medical Association.

Read at the 16th annual meeting of the Mississippi Valley Medical Association at Louisville, Ky., Oct. 8, 1890.

Sometime before his death Prof. Flint promulgated the doctrine of the self-limitation of phthisis and presented it with all of his well-known power and great ability to the profession. This very interesting proposition was at the time the subject of free debate in various medical societies and at a former meeting of the association I had the honor to partially discuss the position taken by this learned teacher and writer.

The recent years have been full of the wonderful results of the study of pulmonary disease and bacteriological research and the possibility of a positive diagnosis has overshadowed the equally interesting question of prognosis. That Prof. Flint's arguments, however, have not been lost to the profession is evidenced by the repeated references to it in recent current medical literature, and many are ready to say with Prof. Stephen Burt of New York that "not a few cases of phthisis have a self-limitation." This author in a valuable paper entitled "Pulmonary Consumption in Light of Modern Research," read before the New York Academy of Medicine, and published in the *Medical Record*, April 12, 1890, takes the tenable position that "phthisis is an infectious disease, only the soil must be fertile or the bacteria will not take foot and grow; that the inheritance of the affection is simply the descent of the degraded cells presenting a vulnerable point for the vagrant germs; that all special treatment is futile; and though persistent destruction of the infectious matter is our best means of prophylaxis, yet to restore the vitality of the lung tissue is as important as to destroy the tubercle bacilli." Following this comes his affirmation of the possibility of the self-limitation of phthisis. In Pepper's elaborate System of Medicine, Vol. III, p. 893, Flint again offers his statement that in certain cases of phthisis "the disease may be said to be self-limited."

It is a just inference that this idea has been well received by many excellent physicians and that it has made a deep impression upon the mind of the profession not more on account of its great champion than because of its plausibility and desirability, for truly as one author says, "it is a comforting thought to the afflicted" and we would add—to the physician also.

I can bring no more interesting question before you; it touches us at all points where we attempt to save life from this dread disease and it is inseparably connected with our opinion regarding the future of a large proportion of our patients. It is right therefore that we should have some fixed idea as to the existence of self-limitation of phthisis and its value in any given case or series of cases.

After having carefully examined the facts cited in support of the proposition I have no hesitation in distinctly asserting that I find no sufficient evdience to warrant us in accepting the statement that phthisis is self-limiting or that the element of self-limitation has a decided influence upon the result in any given case. I do not mean that all cases of phthisis necessarily die from this disease, but I do mean that where phthisis is firmly established, there is nothing in the nature of the disease itself that indicates in any stage a fixed boundary—a line of demarkation, as it were, but rather that all of its tendencies are progressive and downward.

It is well that there should be in all debate a clear understanding as to the meaning of the terms employed and at the outset I am perfectly willing to accept Flint's own definition not only of the term "self-limitation but also of the word "phthisis."

Permit me then to quote in full his definitions as given in his argument: "A disease is self-limited when

it ends in recovery irrespective of extrinsic influences derived from either hygiene or therapeutics. A patient,whatever be the disease, who recovers without any potential remedies or measure of treatment having been employed, and where there has been no material change in any of the circumstances pertaining to daily life, owes the recovery exclusively to self-limitation." To this we readily agree.

He then defines the terms pneumonic phthisis and pulmonary consumption, and says "I shall consider the terms as applicable to all cases of phthisical disease exclusive of acute tuberculosis and interstitial (fibroid) pneumonia." That there may be no mistake as to his use of words I may add that he uses the terms phthisis pulmonary tuberculosis, and consumption, in the same sense (Prac. Med. p. 271). Using then our author's own language, the question is, is there in phthisis, or if you please, pulmonary tuberculosis, a tendency to recover without extrinsic influence derived from either hygiene or therapeutics?

Although as early as 1835, Jacob Bigelow, in a paper which Prof.Flint justly calls remarkable,read before the Massachusetts Medical Society, applied the term self-limited to certain diseases, it was not until 1858 that the latter advanced the idea of self-limitation as applied to phthisis. (Am. Jour. Med. Science, 1858) Twenty years afterward the question was ably re-opened by him in the paper to which reference has been made, and his position virtually accepted as proven.

The deductions in this important essay are based upon clinical evidence rather than argued from a pathological stand-point, and if you will bear with me I will first present an analysis which I have made of the cases which are cited by Prof. Flint, and afterward endeavor to show that the pathology of phthisis, so far as we yet understand it, is opposed to the doctrine of self limitation.

In the first place the argument which Prof. Flint advances is founded upon the deductions made from the history of 670 cases of phthisis. Fortunately these cases are all on record and I shall not only accept the record of each case without question, but follow his own selection, though to very different conclusions.

Among these 670 cases, there were 75 in which either recovery took place or the disease became latent. It is therefore in these 75 cases we have to find the proof of self-limitation and by these must the proposition stand or fall. I must beg you to bear in mind as we go along the definition that a disease is self-limited when it ends in recovery irrespective of extrinsic influences derived from either hygiene or therepeautics.

We find that in 23 of these 75 cases the statement is merely that "the disease ceased to progress for at least several months, and in the majority of cases for several years." By reference to the record we find that the last examination of each gave evidence that the disease was still present—latent in some, as may occur in phthisis, but not self-limited; for "a disease is self limited when it ends in recovery," etc., and these had not recovered. As according to our author's own definition 31 of these cases have no definite bearing upon the point in question, we are restricted to the study of the remaining 44.

As self-limitation is independent "of extrinsic influence, derived from either hygiene or therepeutics," we at once decline the evidence of 21 of the 44 cases, for in all of these pertinent and generally persistent treatment was pursued. Moreover three of these cases subsequently proved fatal, and the last examination showed that at least a third of them still had physical signs of phthisis. We object to these 21 histories as not pertinent. The interest now centers in but 23. "In 15 of the cases hygienic measures constituted the treatment;" but these measures were of such a character as would lead us to hope for favorable results, viz., change of business, out of door life, rest, sea voyages, change of climate, etc. These are potential aids, for as Flint says (Prac. Med., p. 290), "out of door life is of all measures most important." Now, to prove a disease self-limiting, we must eliminate whatever can be reasonably traced to "either hygiene or therepeutics." These 15 cases were given the advantage of favorable hygienic condition, and who shall say they would have recovered without these conditions? Having made use of that remedy which of all others has been found efficacious in phthisis, these 15 cases are certainly not examples of self-limitation.

I have refrained from occupying your time with the details of the author's cases which, in accordance with his own definition of limitation, have been refused as evidence. The history of these is fully given in his work on phthisis, and I have endeavored to deal fairly and justly with the record.

Let us now apply the test to 8 cases which alone remain. These are numbered 1, 4, 7, 8, 14, 20 23 and 24 (Phthisis, p. 187, et seq.) and are the only ones of which the author says: "there was no medical treatment of importance, and no material change in the habits of life, the recovery taking place purely from an intrinsic tendency."

Case I is that of a farmer who, having in the winter of 1842-'43, expectorated what were thought to be pulmonary calculi, was examined in June, 1843; "the only physical sign noted was feebleness of the respiratory murmur." He was in excellent health 13 years afterward. "Prior to the development of the disease the patient had worked very hard on a farm. He left home for several weeks, and after relinquishing severe labor, engaged in buying and selling new lands in Illinois, a business which required much out of door life." Excellent treatment!

Case IV.—A physician, æt. 28 years, had hæmoptysis in October, 1852, and again in January and May, 1853. In May 1853, he had slight dullness at the right summit, with weakened respiratory murmur and crackling, which accompanied inspiration and expiration. In September, 1854, he reported himself well,"a year after recovery;" i. e., his recovery must have dated from Sep-

tember, 1853, five months only after the above symptoms were noted. However, we find that in September 1854, there was still a dullness at the right summit, and the respiratory murmur was feeble.

Case VII is that of a constable, examined in April, 1856. Six years before he had had a hæmorrhage, and shortly afterwards recurrent hæmoptysis for ten days. During the following year Prof. Flint met this man from time to time on the street, and he seemed to be in good health. As this man evidently had phthisis for six years prior to examination, what reason is there, in the absence of a later examination, to suppose that he had entirely recovered during one succeeding year? The statement that he seemed well will apply, at times, to many cases of chronic phthisis. "There is no further record of this case. The treatment consisted of cod liver oil for six weeks, generous living, the use of malt liquors, and out of door life." Very good intrinsic influences we take it.

Case XIV.—A physician, who had cough, hæmoptysis and slight loss of flesh, was examined October, 1857, and found to have evidences of phthisis at the left apex. Five years later Dr. Flint saw him in apparently good health. He had been drinking beer, living generously, with an abundance of exercise out of doors. It seems that in this case and in No. IV., no medical agent was used, though the patients were physicians. They both had the influence of riding and driving in the open air while engaged in country practice.

In case XXIV we find that the patient consulted Dr. Flint by letter in 1859; was relieved of part of her duties as a teacher; took more out of door exercise; traveled in the summer. In 1862 had abnormal dullness, feeble respiration, and increase of resonance and whisper at the right summit. Afterwards traveled in Europe; in 1868 had hæmoptysis; in 1869 increase of symptoms, and she died in the spring of 1871. Did this patient recover, and that without change of hygienic condition?

The three remaining cases do, so far as recorded, seem to be instances of recovery from phthisis without medical or hygiene agency.

No. VIII was a clerk, examined in August, 1856, having had cough for two months previously and hæmorrhage a week before. There was dullness and feeble respiration at the right apex and sub-crepitant rales on both sides. In October, 1856, he was reported well, and was in good health in 1871. The thought is at once suggested, why did he, being examined at a time of greatest danger, not have medical treatment. The case is, however, one of great interest, and is certainly an exception to the general rule, as the disease appeared, progressed and abated within a period of five months.

The other two cases, XX and XXIII, furnish the best evidence in favor of self-limitation, though the record is very short. Two sisters whose parents, three sisters and two brothers, had died of phthisis, were found, one with disease of the left apex, the other of the right. No remedy of importance was given, or change made in the habits of life. Both were well 15 years afterward. Again the question may be asked, why was not some form of treatment or change of condition ordered in these cases, as "no effort had been spared to save the lives of their sister and brothers; traveling, changes of climate, together with remedies, having been resorted to in vain, although perhaps, with the effect of retarding the progress of the disease." With this however we have knothing to do. The record is that these two sisters, for whom nothing was done, alone recovered. Granting that these two cases and possibly the preceding one show evidences of self-limitation, yet they are but three out of 670 and we again quote from Prof. Flint's paper, "self-limitation cannot be inferred from a single case or a very few cases."

The clinical evidence cited by Prof. Flint certainly does not prove the doctrine of self-limitation according to his own definitions, for we find that in the large experience of its able advocate, among hundreds of cases as recorded by himself, that the argument is sustained by few, and in all fairness we confess a doubt as to the pertinence and value of most of these.

Is not this conclusion in accord with our own experience? What physician to-day expects that in a given number of cases of phthisis as they come to him, any small proportion will recover without the help of medication or change in hygiene or environment? Or to put the question more directly, who has so much faith in the doctrine of self-limitation that he would trust it in the slightest degree in planning for the future good of his patients?

So much as we know of the true pathology of phthisis is opposed to the doctrine of self-limitation. In the constitutional predisposition or the general morbid condition which Flint speaks of as the essential disease, we now recognize only that degeneration of the body in whole or in part, which favors the reception and development of the specific factor of tuberculosis. So long as no bacilli are found, the disease cannot be proven to be tubercular. The tubercular cachexia is a misnomer except so far as it is limited to conditions which favor the invasion of the essential germ.

In the ordinary case of tubercular phthisis we now know that we have not only the constitutional fault, characterized, as Sir Andrew Clark has it, "by a progression of symptoms with an ulcerative destruction of a more or less circumscribed, non-malignant deposit in the lung," but in addition, we have a specific morbid change, the result of a specific cause. I need not weary you with a discussion of the exact relation of the bacillus to tuberculosis. Whether the bacilli are the cause or the result of the rapid disintegration is not the question in point. Whether these or their ptomaines or both, are the active factors, may some day be fully decided. This much we know, that where the changes have begun which result in those morbid products in which the tubercle bacilli are found, we have to deal with an active, relentless, progressive foe to human life.

Let us but remember that the bacillus rapidly enters a mucous membrane denuded of its epithelium and passes down to the lymphatics and vessel walls; that according to Metschnikoff and Naegeli it inaugurates a struggle with, and rapidly destroys feeble organic cells, and we must forever abandon all preconceived ideas of the self limitation of phthisis.

Our author says "there should be no room to doubt as to the accuracy of the diagnosis," and the researches of the bacteriologist have placed within our reach the essential element in the diagnosis of tuberculosis, but the knowledge of the existence of this element is directly opposed to the doctrine of limitation without extrinsic aid.

Therefore, clinically and pathologically we must have further evidence of self limitation. I grant you that well proved cases get well. It must be admitted that treatment has in some instances been successful; that resistance has been made to the cell invasion of the bacilli and that the general systemic fault has been corrected. My position is, however, that in every such case, there has been some helpful treatment administered some beneficial hygienic or climatic change accomplished.

Our deductions must therefore be:

1st. That there is no sufficient clinical evidence to warrant us in believing that by self-limitation as defined by Prof. Flint pulmonary phthisis may end in recovery.

2nd. The pathology of phthisis is equally opposed to the proposition.

3d. Although phthisis is not self limited yet limitation is possible through "extrinsic influence derived from hygiene and therapeutics."

One word in conclusion. To no one does the medical profession of America owe more than it does to the memory of Dr. Flint. Though dead, his words live. With reverent hands would we lift the record of his work and in the same fairness which he admired and practiced, would we examine his teachings. In this city which he loved so well and in which was once his home, no words are needed to recall his greatness.

May the analysis of his arguments which we have made, and even the widely different conclusions which we have reached, be counted an honest tribute to the great influence of him whose lips are forever sealed.

THE GALVANIC CURRENT IN THE TREATMENT OF DYSMENORRHŒA.

BY D. DUNKLIN, M.D., SPRINGFIELD, MO.

Read before the Southwestern Missouri Medical Society at Springfield, Mo., October 13, 1890.

The claims made in this paper for the beneficial results of the galvanic current in the treatment of dysmenorrhœa are confined to a certain class of cases in which the dysmenorrhœa is produced by special pathological conditions, it not being my intention to claim for this method of treatment that it can be successfully applied to all cases which are superinduced by a variety of causes.

I am not closely wedded to the generally accepted idea that flexions, displacements, ovarian disease, pelvic cellulitis, etc., are among the principle causes producing this distressing affection, from the fact that we constantly observe these conditions in women, in whom dysmenorrhœa does not exist, the exceptions generally being in those cases where the flexion is very decided. It is a well known fact that the large majority of cases of dysmenorrhœa, which we are called upon to treat, are women who have never been pregnant, and in which we invariably find the so-called "stenosis of the cervical canal." This is the class of cases to which I wish to briefly call the attention of this society, too, relative to the treatment by the galvanic current.

The cases of congenital contraction of the cervical canal are so seldom met with and the per cent of cases so very small as compared with the acquired, that their consideration is not necessary in this paper; I will only speak of cases which may be called the acquired form, for the lack of a better name.

Immediately before and during the menstrual period, the pelvic organs and especially the uterus are in a condition of hyperæmia, the capillaries and smaller blood vessels of the uterus being more or less dilated and the circulation sluggish. This is really a physiological hyperæmia and not an inflammatory hyperæmia; assuming of course that the physiological condition of menstruation goes on in a normal and uninterrupted way. No pathological condition of the uterus results from menstruation, but when a normal menstruation is interfered with, by sudden shocks to the nervous system, mental anxiety, exposure to inclement weather, or anything which disturbs the equilibrium of the nerve centers and acts as an irritant thereto, we no longer have a physiological hyperæmia, but an inflammatory hyperæmia, great or small, just in proportion to the amount of irritation. Then follows exudation of serum and white blood corpuscles, intermingling in the uterine tissue, principally immediately beneath the endometrium, and also between the outer wall of the arterial vessels and their sheath. Total absorption does not take place, and as a result, we have induration and anæmia of the parts involved, the latter being secondary to the inflammatory hyperæmia from presence of the exudation against the wall of the vessel made present by the primary condition, thus materially decreasing the caliber of the vessel and robbing the surrounding parts of their normal quantity of blood. The pressure of the exudations themselves has a tendency to contract the caliber of the cervical canal, and the anæmia to produce atrophy; for want of sufficient blood supply, we are now confronted with the so-called "stenosis of the cervical canal" and a hard, contracted, indurated cervix, tightly binding the nerve filaments, which are ready at the next menstrual period to loudly

protest against any irritation or disturbance of any kind.

The following period unavoidably produces this disturbance, and the result is painful and distressing menstruation.

In the treatment of this class of cases absorption of the exudated material is the sine qua non in the matter of a permanent cure. Take away the exudations, open the blood vessels to their normal size and relieve the pressure upon the nerve fibers; when this is done we will have a larger cervical canal, and a painless menstruation. I am not yet ready to believe that forcible dilation is the best way to accomplish this, when we have at our command the galvanic current, which is less painful to the patient and I believe more permanent in its results.

In the application of the galvanic current we must always bear in mind the physiological effects of the respective poles, viz., positive and negative. An electrical current always flows from the positive to the negative and never from the negative to the positive pole. When the current is of sufficient intensity alkalies and hydrogen are generated at the negative pole and chloride and the acids are generated around the positive pole. The negative pole always relaxes and softens the indurated cervix, permitting absorption of the indurated condition to immediately commence, while the positive pole contracts and has the opposite effect in this special form of dysmenorrhœa.

Apostoli in speaking of the effect of the negative pole says: "This is the remedy par excellence for indurated chronic metritis, whether complicated with amenorrhœa or dysmenorrhœa, and may be used with equal success in other inflammatory processes in which hæmorrhage does not predominate."

In the class of cases under consideration I invariably use the negative pole to the endometrium with an ordinary applicator wrapped with a thin film of absorbent cotton dipped in water. Well or spring water is preferred—as cistern or distilled water is not so good a conductor of electricity—(especially distilled water) as they do not contain any mineral or earthy matter which is essential as a conductor of electricity, thus causing more or less resistance to the current, and will require more calls, as can readily be proven by the milliampere meter.

The round-curved uterine electrodes, which are furnished with the batteries, I do not use in these cases, as I prefer the current applied through welted cotton and not by the unprotected metalic electrode, as I believe it has a milder effect upon the tissues or membranes with which it comes in contact, and the result is equally as good. The face or bearing surface of the abdominal electrode to be connected with the positive pole, may be covered with sponge or chamios skin, but better still, lambs-wool flannel, which is a better conductor of electricity on account of containing more animal oil.

The metal underneath the covering may be made of various materials but I believe soft copper to be the best. The bending post connecting the cord should always be in the center of the electrode and not on the end or corner in order to get an equal distribution of the current through the electrode and over the surface under it.

The strength of the current I use ranges from 20 to 30 milliamperes. It is not necessary to use higher currents than this to accomplish favorable results. Some patients will tolerate higher currents than others just as they will bear greater dosage of any therapeutical agent. The sittings should average about 6 minutes exclusive of the time required to reach the maximum height of the current and also to release it. The current should always be turned on and off very gradually, and never suddenly, otherwise it produces a painful shock to the patient. My usual practice is to consume 1 minute in reaching the maximum intensity which I propose to use, and 1 minute also to release it. This would keep the patient under the influence of the current for 8 minutes assuming that we let the current stand at its highest point for 6 minutes.

I believe it is now an admitted fact that the strength of a given current doubled will produce the same result in one-half the time that a current one half the strength will produce. In other words, a current the strength of 30 milliamperes will produce the same effect in 5 minutes that a current of 15 milliamperes will produce in 10 minutes.

Semi-weekly is sufficiently often to give the sittings. The treatment should be commenced 3 or 4 days after the close of a menstrual period, and be given regularly twice a week until 3 or 4 days of the next expected period, then follow this period up with the treatment to the next period the same as before. The treatment can now be suspended and the case discharged with a future menstruation free from pain.

It should be remembered that in giving a patient her first sitting, we must exercise the utmost care and attention to both the patient and the battery, as the current will in some few cases—especially at the first sitting—cause faintness, nausea and vomiting, all of which should be avoided if possible as the patient will generally object to further treatment by this method if such effects follow the use of the current.

I have yet to record a single failure when this treatment was carefully and systematically pursued. The invariable result is immediate and permanent relief.

If I had to discontinue the use of the galvanic current in this class of cases, I would discontinue to treat this form of trouble.

TREATMENT OF EPILEPSY.

BY PHILIP ZENNER, A. M., M. D, CINCINNATI, O.,

Clinical Lecturer on Diseases of the Nervous System in the Medical College of Ohio.

Abstract of a Paper Read Before the Mississippi Valley Medical Association, at Louisville, Ky., Oct. 10, 1890.

In order to judge properly the effects of remedies on epilepsy it is necessary to study the natural course of

the disease, and how other influences than therapeutic measures modify the disease.

According to Nothnagel 4 to 5% of the cases of epilepsy get well without treatment. Various pathological processes may favorably modify the disease. Acute febrile processes sometimes cure it, and, generally, cause a temporary improvement. Injuries and wounds, or surgical operations, are likely to be followed by lessened frequency, or a longer or shorter absence of the fits. A change of scene or place, entering any asylum or hospital, or the administration of a new drug, are likely to cause a temporary improvement.

The success of therapeutic measures depends largely on the form of disease presented. *Grand mal* is much more amenable to treatment than *petit mal.* The latter, and cases with mental symptoms, are usually very intractable to treatment. The shorter the duration of the disease, and the smaller the number of attacks, the more favorable is the case for treatment.

The etiological factors are exceedingly important in relation to treatment. In all cases there is a constitutional vice, either hereditary or acquired, without which the disease would not exist. Besides this there is, in many cases, a peripheral source of irritation which in a reflex way excites the attacks, and may even have produced the constitutional condition. Among such conditions may be mentioned injuries and wounds, disturbances in the digestive tracts, various genito-urinary diseases, eye strain, disease of the nasal mucous membrane, etc. Very often too much weight has been given to such conditions, and even harm done in their treatment, but we must also be careful lest we run into the other extreme, and give them no weight. Each case must be individualized and carefully treated on its own merits. But in all cases, whether such local disease be found or not, treatment for the constitutional condition should be applied, chiefly proper hygiene and hydrotheraphy.

With this treatment we may succeed in many cases without further medication, especially when there have only been a few convulsions. But in chronic cases we must add some of the anti-epileptic drugs. The number of such drugs which have been handed down to us is very large. The most important of those of the pre-bromide period are nitrate of silver, oxide of zinc, digitalis, and belladonna. Of these belladonna is the most used to-day, and is often a valuable adjuvant to the bromide treatment. Digitalis is more or less in use, being of greatest value in cases with weak hearts and feeble circulation. But the bromide treatment has supplanted all others to-day and is far more effective in the majority of cases. As to the size of the dose, there is great variability, some not bearing small doses well, while others can take four or five drachms daily for an indefinite period. There is but one rule to follow, to give large enough doses either to entirely control the disease or to produce slight bromism. It is best to begin with small doses, one drachm two or three times a day, and gradually increase until the desired effect is obtained. Sometimes the medicine seems to lose its effects with time, then an increase is necessary. After learning what dose can be borne, or is effective, the medicine should usually be continued in the same doses for a long time. When the convulsions only occur at stated periods, as during the menses, it is well to give large doses for a few days before the attack is expected and in the interval give smaller doses. If no more convulsions appear two or three years should be allowed to elapse since the last fit before beginning to gradually reduce the medicine. If the convulsions recur at times it may be necessary to continue the medicine for life.

The medicine should not be discontinued suddenly, unless for urgent causes, as such a withdrawal may be followed by severe recurrence of the disease. If it be necessary to reduce the drug for other reason than its long control of the disease, it is best to substitute the deficiency with some other anti-epileptic drug. Seguin speaks very highly of chloral used for this purpose. He often substitutes from one-fifth to one-half of the bromide dose with an equal quantity of chloral and thinks the combination has a greater control of the fits, and less ill effects, than larger doses of bromide.

The ill effects of the long-continued use of the bromides can often be averted with care. The disturbances in the digestive tract can often be avoided by very largely diluting the drug, preferably in alkaline waters. Cutaneous eruptions need usually not interfere with the treatment. Sometimes they can be controlled with arsenic. The blunted condition of will and intellect is often less noticeable after the system becomes accustomed to the bromide, or can be improved by slightly diminishing the dose. The same is true of the altered disposition, irritability, etc., sometimes manifested after the fits have ceased to appear. Any tendency to impaired nutrition may, perhaps, be avoided by administration of cod liver tonics and nutritious food, and a weak heart may be supported by digitalis.

If great attention is paid to details and the patient persuaded to persevere in the treatment—always a difficult matter—most cases can be benefited and in quite a number a practical cure, and in a few, an actual cure, can be effected.

The bromide of potassium is the kind of bromide in most common use and is very effective, but on account of its having a less depressing effect on the heart the sodium salt is often preferred. A mixture of the bromides of potassium, sodium, and ammonium is a favorite combination.

Other bromide preparations, bromide of gold, of nickle, etc., have, as yet, had no extensive trial.

A number of other drugs have appeared in the medical journals in the last year or two in connection with the treatment of epilepsy. Borax, though not a new drug, has been tried at many hands, in some instances with favorable effects, in others unsuccessfully. It is given in from ten to thirty grain doses. After long use it is liable to produce ill effects, as disorder of the

alimentary tract, cutaneous eruptions, impaired nutrition, etc., which may be averted to some extent by largely diluting the drug, with arsenic, cod liver oil, etc. The author tried it in a number of cases with apparently favorable effects, but the time is yet too short to tell anything of its real value.

Amylhydrat was found very valuable in the status epilepticus. Antipyrine, antifebrine, and some other drugs recently used seem to have a temporary but not a permanent control over the fits. Probably many of these remedies will assist us where a temporary suspension of the bromides is necessary, and perhaps they may prove to be of value in combination with the bromides. Amadel states that for four months no convulsions occurred in the asylum at Cremona since he combined the antipyrine with the bromides.

Surgical Treatment.

Operative procedures which have been long cast aside and ligature of the vertebral arteries whose value is, at least, doubtful, were brought into review.

Trephining for epilepsy is one of the oldest operations of surgery. At one time it was resorted to in any or all intractable cases. Thus brought into discredit for a long time it was scarcely done at all. To-day it is done with more discrimination.

It is now resorted to chiefly in traumatic cases. The success denoted by statistica tables is misleading. Most reports are made within a short time after the operation, whereas a number of years should be allowed to elapse before a cure is pronounced.

The author believes those cases to be appropriate for an operation in which the lesion is a limited one, its location ascertainable, and its removal possible; that is, the operation must have a distinct and definite purpose, the removal if a source of irritation. The location of the lesion should be indicated by either local symptoms such as local pain or tenderness, reflex phenomena, convulsive movements, or fully developed convulsions produced by pressure over the source of irritation, etc., or nervous (cortical) symptoms such as monaspasm (Jacksonian epilepsy), monoplegia, aphasia, or sensory, occular, aural symptoms, etc.

The object of the operation should be the removal of the source of irritation, the extirpation of the entire area of the disease. In order to do this it may be necessary to remove, in connection with the cicatrix, surrounding brain substance.

Those cases are more favorable for a complete cure where the epilepsy is of the Jacksonian type, because it is more likely that the lesion is quite circumscribed,and that with its removal the disease will be eradicated. When the epilepsy is of the ordinary type there is the probability that the disease has been fully engrafted in the system and will not disappear with the removal of original source of irritation. For similar reasons there is a greater probability of success if the operation is performed soon after the injury than if performed at a later period.

Operations have also been made in a small number of non-traumatic cases where the disease was of the Jacksonian character. The idea is to remove the cortical center wherein the disease appears to be located. It is yet too early to say whether this operation will have a future.

COUGH OF NASAL ORIGIN.

BY A. B. THRASHER, M.D., CINCINNATI.

Abstract of a paper read at the sixteenth annual meeting of the Mississippi Valley Medical Association at Louisville, Ky., October, 1890.

Cough is a reflex phenomenon due to the irritation of a nerve-fiber in the air-tubes, larynx, pharynx, nose, ear, stomach, etc.

A normal cough is for the purpose of freeing the air-tract from some foreign body. Irritation of the upper part of the trachea, and the ventricles of Morgagni most frequently produces cough. An irritation in many other locations may be referred by the sensory centers to this region and thus give rise to cough. Inflammation of the cavernous bodies of the nose or of the adjacent septum has been known to give rise to a distressing cough, and has been mistaken for evidence of tubercular disease. This is more apt to occur in a person of neurotic temperament. The cough due to nasal disease may sometimes be recognized by its metallic ring and the absence of expectoration. It can, as a rule, be provoked at will by touching the irritable spot in the nose with a silver probe. Dr. Thrasher recited three cases, illustrative of nasal cough, from his private practice. In Case 1 there were no subjective symptoms of nasal disease. The cough had been present for three months and was not benefited by the usual cough mixtures. The lower turbinate was found to be hypertrophied, and touching it with a probe provoked violent coughing. The cautery was applied and in three days the patient ceased to cough.

Case 2.—A young lady had been coughing violently for three months. She referred the irritation to the throat, which had been pencilled and sprayed for some time with no relief. Touching the posterior extremities of either lower turbinate produced violent cough. Treatment as Case 1 with good result in two months.

Case 3.—Cough had been present six months and was not benefited by constitutional or local treatment. The seat of the trouble was found to be in the left middle and right lower turbinate. Treatment similar to other cases was followed by cessation of cough within a month.

Venereal Warts are cured by applying an ointment containing 10% of the oleate of mercury.

TRANSLATIONS.

PROCEEDINGS OF THE TENTH INTERNATIONAL MEDICAL CONGRESS.

TRANSLATED BY DR. F. NEUHOFF, ST. LOUIS.

[CONCLUDED.]

Antipyrine in Infants.

Ashby has studied the effect of antipyrine in children and has tried to determine the effect of different drugs in the various fevers.

In specific fevers it is better to have recourse to quinine and to cold compresses. Antifebrin and phenacetin may be employed in scarlatina and typhoid fever, when in spite of the high temperature, there are no grave local phenomena.

On the other hand, in certain cases, as grave scarlatina for example, these medicaments cause too much depression, and this is even true of cold baths.

In broncho-pneumonia and pneumonia, Ashby recommends the application of ice to the head and chest, and in case these measures fail, to have recourse to cold baths of 12° to 20° R.

Dr. Pott does not think antipyrine useful in diseases with a typical course, such as pneumonia. It is only in cases of continued fever, that it is necessary to interfere, and even then one is far from always succeeding in arresting the consumption of tissue, even when one lowers the temperature.

When antipyrine is given. and the lowering of the temperature is accompanied by an improvement, then the medicine should be continued. If the opposite occurs, it should be discontinued.

Pott is especially partisan to temperate baths as antithermics. Medicines have especially the disadvantage of enfeebling the heart already depressed by the disease.

In the experience of Henoch antipyretic medicines have sometimes caused collapse. He is, therefore, also partial to the cold baths.

Rehn, on the contrary, regards antipyretics as useful and has never observed bad effects from their employment. He rejects antifebrin in infantile therapeutics; he uses antipyrine and phenacetine with success. He prevents vomiting, which occasionally follows the ingestion of antipyrine, by joining with it a small amount of stimulant.

In many diseases, as diphtheria and scarlatina, M. Caille prefers the indirect to the chemical antipyretics. He recommends antiseptic washes for the nose, mouth, and the pharynx, and gives internally alcohol and digitalis.

Thus we see that many members of the congress are in favor of the cold bath as an antipyretic. This is also the opinion of Steffen, who employs it in diphtheria and scarlatina. He finds that if cold baths do not lower the temperature in scarlatina, the disease ends in death. —*L'Union Med.*

Dilatation of the Stomach as a Cause of Neurasthenia.

Dujardin-Beametz said: The treatment of gastric dilatation has shown that as the disease gets better, certain symptoms showing nervous disturbance disappear. These secondary symptoms, which were classed under hypochondria by the ancients, were designated gastric neurasthenia by Beard.

Bouchard showed that these symptoms are due to toxines, which are produced through faulty digestion and are then absorbed. The liver, especially, becomes saturated with these toxines.

But, what is the cause of the gastric dilatation? It has been attributed to weakness of the muscular coat of the stomach, dependent in turn on some hitherto unknown disease of the nervous system.

Dujardin-Beametz distinguishes two varieties of dilatation of the stomach.

In the first variety, dilatation of the stomach and the nervous symptoms may be considered as simply co-existing, without intimate connection. This is proved by the fact that treatment which cures the dilatation does not influence in neurasthenia.

In the second variety of dilatation of the stomach, there exists the closest connection between the dilatation and the neurasthenia. The symptoms of this variety consist chiefly in digestive complaints, various disorders of the abdominal organs, and nervous disturbances.

Objectively there exists, besides gastric dilatation, constipation, temporary congestion of the liver and ectopia of the right kidney. The extremities are cold, the hands moist. Bouchard even describes characteristic deformities of the hands as symptoms.

The nervous symptoms may be very odd, but never hysterical. Most noticable are general weakness, rapid exhaustion, neuralgic pains, and tendency to melancholia.

Therapeutically, Dujardin-Beametz thinks to have obtained the best results by gastro intestinal antisepsis:

1. Salicylate of bismuth, β naphthol and salol internally.

2. To clear away the toxines, and in cases with constipation, as well as in those with diarrhœa, 1 in 1000 α-naphthol solution.

3. Dietary restrictions, to prevent as far as possible the generation of toxines. Vegetable food is the best. Fish, game and cheese should be avoided. Instead of these, fresh and well cooked meat should be substituted. Meals must not be taken too frequently, and drinks ought to be somewhat restricted.

4. Massage of the stomach and abdomen. Bodily exercise. Hydrotherapy.—Correspondent. *f. Schweitz. Aerzte.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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SATURDAY, NOVEMBER 1, 1890.

How Does the Inhalation of Hot Air Influence the Lungs?

The inhalation of hot, dry air in the treatment of phthisis, as recommended by Halter and Weigert, has not by any means fulfilled expectations. Reports from various quarters declared that the patient was made worse by the procedure, and in several cases profuse pulmonary hæmorrhages were ascribed to it. Leaving this aside, however, Dr. Sehrwald (*Deutsch. Med. Woch. Centr. f. Ther.*) declares that the physiological and physical predispositions on which the method rest are entirely untenable. Halter started with the fact, discovered by Koch, that the growth of tubercle bacilli comes to a standstill at a temperature of at least 41°C., and from this deduced very erroneous conclusions.

Sehrwald gives the following as the result of his own investigations along this line:

1. Hot, dry air, inhaled through the nose at a temperature of anywhere from 50 to 350° C., is unable to raise the temperature of the lungs more than 1° C. at the very most, even though the inhalation be continued for 1½ hours.

2. The same increase in temperature of the lungs occurs when air at an ordinary temperature is hurriedly breathed.

3. Since in breathing hot air through the nose respiration becomes more rapid and forced, the increased temperature of the lungs may be in part, if not wholly, ascribed to the changed manner of respiration.

4. The mucous membrane of the trachea is more sensitive to hot, dry air than that of the nose and mouth.

5. The highest temperature at which dry air can be inhaled into the trachea is 80° C.

6. The pulse rate rises to from 80 to 114 during the inhalation.

7. The temperature of the lungs at the same time increases not quite 1° C.

8. The opinion of Halter that tubercle bacilli are destroyed by the repeated inhalation of air at a temperature of 41° C., is an arbitrary assumption and entirely unproven.

Is Bromide of Ethyl of any Value to the Physician as an Anæsthetic?

This question, which has been discussed for years without result, Prof. Robert (*Fortsch. der Med.—Med. Chir. Rundschau*) believes may now be answered with a decided "yes." Bromide of ethyl (C_2H_5Br) was discovered by Serullas in 1827, and was first used as an anæsthetic with animals and men by Nurnely in 1847. Lately Longgoard has again brought the drug into notice, thus giving the impulse to the present methods of preparing it. Unfortunately, as a result of insufficient care on the part of physicians in designating the drug, mistakes were made several times in substituting for it another substance closely related to it chemically, the formula of which is $C_2H_2Br_4$, and which is a deadly poison. In 1888 (at a meeting of dentists in Munich), F. Schneider spoke of the remedy in terms of commendation, and he recently published the result of investigations. He assumes two stages in bromide of ethyl anæsthesia, the transition from one to the other being very rapid. In the first stage the subject is still conscious, but we observe anomalies in sense perceptions and a slight lowering of sensibility; cardiac and respiratory irregularities occur seldom, and are but slight in degree. This short beginning stage passes rapidly into the second, that is, the stage of loss of consciousness, which is sometimes, but not often, preceded by spasmodic movements of the voluntary muscles. The drug is not eliminated through the urine or the skin, but through the lungs. Dilatation of the pupils was but slight; contraction of the pupils occurred only in the deepest anæsthesia and did not last long. Sphygmographic tracings made by Schneider during the anæsthesia did not show much change from the normal. Since the boiling point of ethyl bromide is 30° C., lower than that of chloroform, it is easy to understand why (1) the narcosis is much more rapidly accomplished than that with chloroform; and why (2) the after effects are much less unpleasant and disturbing. Schneider observed vomiting in only a few cases during or after anæsthesia, snd headache was very infrequent. The breath, also, did not have the unpleasant garlic odor after anæsthesia. As a rule, the pulse increased in frequency. Destruction of the red blood corpuscles did not occur, even in the animals to which lethal doses were given. Neither were hæmoglobinuria or icterus present after anæsthesia. Ethyl bromide anæsthesia has, moreover, nothing to do with hæmoglobin, for it

can be used in animals free from hæmoglobin. Anæsthesia by means of this drug is accomplished through cerebra hyperæmia, as shown by Schneider in the vessels of a trephined dog. This hyperæmia is, however, much less than with chloroform. The skin and entire periphery of the body become somewhat anæmic, with a falling temperature.

The Dietetic Treatment of Digestive Disturbances in Children.

Dr. G. Rheiner, in *Wiener klin. Woch.* (*Therap. Monatsh.*), warns above all against beginning the treatment of digestive disturbances in children with drugs; the dietetic management is and will remain the most simple, as well as by far the most rational. A child that manifests moderate gastric disturbances shortly after being weaned, should again be nourished from the breast, in order to quickly relieve it from its digestive difficulties. In cases of gastric dyspepsia occurring in bottle-fed babies, Rheiner warmly recommends washing the stomach, as introduced by Epstein, of Prag. After this procedure the digestive powers of the stomach will probably remain weak for a few hours, and for a short time it will be necessary to replace the water lost by the body by a suitable diet. As such, albumen and water (the white of an egg to a pint of water), barley water, or a very weak infusion of tea, suggest themselves. In intestinal dyspepsia we should carefully guard the stomach against disturbing influences. For this reason anti diarrhœal mixtures should not be at once administered; we should rather order an exclusive diet of milk and barley gruel to a suitable proportion of water. Here the constipating qualities of barley gruel are valuable as compared with oatmeal gruel; the latter, used in constipated infants, will, as a rule, bring about two or three loose evacuations per day. In closing, the author emphatically remarks that in many cases we can get along altogether without drugs.

On the Pathology of Snake-Bites.

During the last three years Dr. Justyn Karlinski, of Stolac (*Fortsch. der Med.—Med. Chir. Rundschau.*) has had opportunities to observe and treat 21 cases of snake bite (mostly from the horned viper), as well as to institute experiments with the poison obtained from living snakes. Most of the wounds were about the foot, as the people (of South Bosnia and the neighboring districts) generally go barefooted; bites of the hand were much rarer. The study of 21 cases shows that the effects of the poisons were disturbances of the circulation and of the action of the sensory and motor nerves. The circulatory disturbances (œdema, cyanosis and coldness of the skin) consisted partly in complete, and partly in incomplete, clotting of the blood in the parts immediately surrounding the bite, in thrombosis of the vessels of the parts, bringing about serious local changes, such as moist or dry gangrene; mummification of one or more toes, or of all the toes, and of a part or the whole of the dorsum of the foot, were repeatedly noted. The disturbances of the nervous system manifested themselves as a hyperæsthesia in the beginning, afterward anæsthesia of the entire body, cramps of various muscles and general discomfort (a feeling of prostration, cold sweats). Twenty of the patients recovered; the other, a two-year-old child, bitten in the calf of the leg, was seen one-half hour after the accident, and the bite was treated with the actual cautery; ammonia (1 in 30) was injected hypodermically, and wine administered by the mouth. The child improved for a time, but died on the third day of a rapidly developing pneumonia. In this case it was impossible to obtain a post-mortem, and the author believes the sudden death was to be attributed to embolism in the heart or lungs, as a result of thrombosis. From a therapeutic point of view the 10% solution of chromic acid showed itself to be equally as effective as chlorine water, for, injected hypodermically near the wound in doses of C. Cm. (8 ♏) even after the lapse of fifteen minutes it arrested the action of the virus, which had already begun to manifest itself. Comparisons of viper poison with that of the cobra, which have been made by Aron, show that the former is much weaker. The author was able to prove the immunity of the animals to the poison of their kind, while having several of the reptiles in captivity. He also observed the extremely rapid action which the poison had on frogs; the largest frogs would be dead ten minutes after being bitten. Nine survived the bite from 8 to 15 minutes; after three minutes they showed paralysis of the extremities, sat cowered up, and reacted but little to external irritation.

The Treatment of Peritoneal Tuberculosis.

Prof. Oswald Vierordt, of Leipzig, believes that tubercular peritonitis, subacute and chronic, occurs much more frequently than has hitherto been believed, as evidenced by his own and Prof. Pribrom's observations (*Deutsch. Archiv. f. kl. Med.—Med. Chir. Rundschau.*). He makes a distinction between those cases with evident fluid exudate and those in which only more or less circumscribed round tumors, diffuse thickenings of the abdominal wall, are to be distinguished. When large amounts of free exudate collect in the peritoneal cavity, the chief danger lies in the mechanical pressure, whereby the fluid impedes circulation and respiration; where the exudate is encysted severe symptoms may sometimes arise from knuckling or compression of the intestine. The chief difficulty lies in the fact, that unless there is at the same time a tuberculosis of some other organ apparent, we are seldom in a position to diagnose with positiveness a tubercular peritonitis. If rest, diet, Priessnitz' poultices, ungt. cinereum and sapo viridis prove unavailing, the question arises, whether

or not a laparotomy is in order. It is well known that the results which have been attained by ncision and evacuation of the ascitic fluid have been extraordinarily favorable. Vierordt does not doubt these reports, but believes those cases of alleged cure are entitled to credence only where a microscopical examination of the exudate showed tubercle bacilli beyond all question. Most of the operations hitherto been the result of errors in diagnosis, the most requent condition being peritonitis with a free, or more frequently, an encapsulated exudate. Evil results following laparotomy in such cases have been but very seldom observed, and even in those cases, where the tuberculosis continued to advance after the operation, there was for a long time a considerable improvement in the patient's condition. Experience has shown that puncture has no effect of any consequence. As is well known the subject was thoroughly discussed at the last International Congress; here, too, the communications were in general very favorable as to the results of laparotomy in such cases.

MEDICAL ITEMS.

The Cholera in Spain.—According to official returns from Spain, 1,814 fresh cases of cholera and 959 deaths occurred during the month of September, thus bringing the totals since the beginning of the epidemic up to 4,870 attacks with 2,516 deaths.

The New York Polyclinic.—The curators of the New York Polyclinic announce that hereafter they will refuse to matriculate all persons who have not been graduated by some recognized medical college, or who have not obtained a legal permit to practise medicine, after two full years at such college.

An Ideal Bactericide.—*The National Druggist* tells us that Prof. Stilling, of Strasburg, claims to have discovered antiseptics strong enough to kill bacteria in a concentration not injurious to the human body, and at the same time diffusive enough to spread wherever, on a wounded surface, suppurative micro organisms exist.

To Mask the Odor of Ichthyol.—The *Pharmaceutische Zeitung* recommends the addition of 10% of oil of citronnella. The addition is said to be harmless in any case, while in rheumatism it is claimed that it will be positively beneficial. In India the oil is used to a considerable extent as a remedy in rheumatism, and, it is declared, with very good results.—*J.A.M.A.*

Hypodermic Artificial Respiration.—At the meeting of the Academie de Medecine, Dr. Cobos (*La France Medicale*, August 22, 1890) proposed the hypodermic administration of oxygen under the skin, the oxygen so administered being rapidly absorbed by the capillaries, and thus acting as a substitute for the normal pulmonary oxygenation of the blood.—*Ther. Gaz.*

Dry Cupping for Infantile Convulsions.—Dr. T. J. Heard says: In 19 cases out of 20, infantile spasms or convulsions may be arrested in one minute by the application of one or two dry cups on the back from the seventh cervical to the first dorsal vertebra. This will secure a remission, during which emetics, purgatives, or anything else that indications require, may be used.—*N. Y. Med. Times.*

The Duration of Life in the Medical Profession.—It is calculated, on the basis of statistics, that the average duration of the lives of medical men in Prussia from the end of the thirtieth year onwards, is somewhat below that of the total male population of the country, though the latter includes a large number of decrepit and diseased persons, such as the nature of the medical profession excludes.

The Medical Examining Board of Tennessee.—The medical practice act of Tennessee, resembling that of New York, has gone into effect; and the State Board of Examiners, containing representatives of regular medicine, homœopathy, and the eclectics has been appointed. The hydropaths were left out, and Dr. J. F. Woodward, of McMinnville, who is one of that school, has ventilated his indignation in a picturesque circular, taking the appointing powers to task for the omission.

Glycerine in Veterinary Practice.—We have advocated the use of glycerine in veterinary practice for some time. The more we use it the more convinced we are of its value. We have used it with very satisfactory results in constipation in horses and dogs, and recently we have been using it in flatulent colic in horses. Half an ounce injected into the rectum will cause an evacuation of the bowels in from three to five minutes, followed by immense flow of gas. They may be repeated every fifteen minutes.—*Chicago Med. Times.*

Gargle for Tonsilitis.—*The Medical Age* says: The following has been a very useful gargle in the treatment of tonsilitis, and is highly recommended:

℞ Tr. guaiac. ammoniat.,
Tr. cinchonæ comp., - aa grammes 15.00.
Potassii chlorat., - - grammes 7.50.
Mel. desp., - - grammes 15.00.
Pulv. acaciæ, q. s.,
Aquæ, q. s. ad - - grammes 120.00.

M. Sig. Use as a gargle, and take a teaspoonful every two hours.

Aristol in Psoriasis.—Dr. Schirren has observed the effects of aristol in ten cases of psoriasis. Aristol is a thymoliodide, which precipitates as a reddish-brown amorphous powder when a solution of iodide of potassium is added to an alkaline solution of thymol. Aristol has been found harmless, without toxic qualities, and is efficacious in psoriasis, though of slower power than other drugs now employed. It is not a specific against

all skin diseases. Eruptions of various forms of psoriasis, and of long or short duration, are caused to disappear under a 10% salve.—*Ex.*

A Novel Feature in Dispensary Service.—One of the latest additions in the way of dispensary service in this city is in one of the well known churches in which the pastor announces in his bulletin that he has had fitted up in connection with his study a completely equipped dispensary for the use of members of his church who desire treatment, and that a well known eye and ear surgeon will render all necessary medical attendance. This is truly a new and novel feature in connection with the administration of the gospel, and the only inference to be drawn from the departure is that the pastor concedes the fact that he makes some of the members of his congregation sick, or that the surgeon in charge is desirous of obtaining a little free advertising through the agency of what is familiarly known as the "Church Advertising Dodge."—*Cin. Med. News.*

SOCIETY NEWS.

SOUTHERN ILLINOIS MEDICAL ASSOCIATION.

This Association will hold its Sixteenth Semi-Annual Meeting at Chester, Illinois, Thursday, November 20, 1890, and will continue two days.

Programme.

Call to order by the President.

1. Invocation.
2. Address of welcome on behalf of the citizens by his honor the Mayor, J. J. Morrison.
3. Address of welcome on the part of the profession by Dr. W. R. McKenzie.
4. Response by a member of the Association.
5. Reading and correcting of minutes of last meeting.
6. Report of censors and election of new members.
7. Reading of correspondence from absentees; and other communications.
8. Reports of standing committees.

Committees.

Practice of Medicine.—Drs. W. R. McKenzie, Chester; A. B. Beattie, Red Bud; Chas. E. Grizzell, Vergennes; F. P. Reagin, DeSoto; A. M. Lee, Carbondale, J. McD. Lawrence, Mill Creek.

Surgery.—Drs. H. C. Mitchell, Carbondale; D. S. Booth (Jr.), Belleville; J. B. Rosson, Ava; A. N. Stout, Sato.

Obstetrics.—Drs. J. H. Norris, Metropolis; M. C. Carr, DuQuoin; L. D. Burgess, Sparta; G. S. Rainey, Salem.

Anatomy and Physiology.—Drs. A. Wetmore, Waterloo; F. P. Gills, Menard; W. T. Ingram, Murphysboro; Earl Green, Mt. Vernon.

Gynæcology.—Drs. S. W. Marshall, Sparta; J. T. Pollock, Chester; W. T. Maclin, DuQuoin.

Diseases of Children.—Drs. C. A. Mann, Chester; J. W. Wier, Sparta; Minnie Sanders, Jonesboro.

Diseases of Old Age.—Dr. G. L. Hallam, Centralia.

9. Report of Special Committees.

New Remedies.—Dr. E. Mayer, DuQuoin.

Ununited Fracture.—Dr. W. W. Essick, Murphysboro.

Typhoid Fever.—Dr. I. W. Ellis, Murphysboro.

Insanity.—Dr. E. B. Elrod, Anna.

Railway Surgery.—Dr. G. G. Parker, Cairo.

Differential Diagnosis.—Dr. F. M. Agnew, Makanda.

Surgical Anatomy of Brain.—Dr. D. S. Booth, Belleville.

Necrology.—Dr. L. Dyer, DuQuoin.

10. Unfinished new and miscellaneous business.
11. Reading volunteer papers and reporting cases.
12. Appointing committees and delegates.
13. Selecting the place of next meeting.
14. Adjournment.

Officers.

President.—O. B. Ormsby, M.D., Murphysboro.
Secretary.—Dr. E. A. Davis, Ava.

SELECTIONS.

THE MEDICAL POLITICIAN.

An Original Contribution to Medical Society Literature.

BY THE MEDICAL MAN IN THE MOON.

The following taken from the *American Pract. and News*, will undoubtedly start a responsive chord vibrating in the breasts of many of our readers. It is a most garphic pen-portrait:

The medical politician is one who for self-aggrandizement pushes himself and friends to the front, captures all the offices of the medical societies, courts the notoriety of the newspapers, and is about as reliable as the average ward bummer in municipal politics. His fort is the country practitioner,and among his followers at medical gatherings one can always find a group of these to whom he has unfolded his piteous tale and whose sympathies he has thoroughly aroused. He says, "You see, my dear fellow, our mutual friend McClung has worked harder for the society, written more articles, and recived less recognition than any man in it. He is the man for president; and unless you are influenced by that crowd of jealous fellows, headed by Drs. Smith and Jones, you will vote for him. Now, my dear boy, Smith and Jones have not done a thing for this society. As long as we have had charge of it they have kept away, and at once they step forward and oppose our candidate! What is the matter with our candidate! He's all right!!! Let's take a drink. Did you hear the last story about——," and away they go,

the country practitioner innocent of the undercurrent of medical politics, firmly convinced that his friend is his friend, is a good fellow, and is about to be shabbily treated by others envious of him. These others are usually men who stand and have stood at the head of the profession, men who want to go to medical societies for the mental benefit obtained, and who are sick to death of medical politics. These latter never have a candidate of their own; they only ask for a man who can not be controlled by cliques, a just man whom the office seeks. Who ever heard of the office seeking a medical politician? Yet, like the june-bug of classic fame, he gets there all the same. But he, the medical politician, will assure you that he "never asked a vote." True, it was his brother Isadore, his *fidus Achates*, who has circulated among his friends and practically secured his election before the majority of the convention had given the matter a thought; before the programmes are printed this Macedonian Phalanx has met, armed itself for the fray, and sworn to elect their chosen brother at any cost. They believe in the good old democratic doctrine of rotation in office, and so, in their secret meetings, pitch it from one to another; and fearing they may be suspected, go out and cry "Stop, thief!" at some one else, so that attention may be diverted from themselves. With an air of injured innocence they assure their dear friend, the country practitioner, that they never dreamt of the office, and, had this unexpected and unholy opposition not shown itself, they would not accept it; but now that the other side want to make a factional fight of it they were ready to trust themselves to their friends, who would see that they were not brutally slaughtered.

And the opposition—what are they doing? Are they, profiting by past experience, choosing a candidate whose hands are free from stain, whose record shows him to be a sober, industrious man, zealous in his profession, and upright in his dealings with all, an unselfish man, who is proud of his profession and is uplifted by it, a man who seeks eminence only from the excellence of his attainments and the righteousness that is within him? Are they about to present such a man—a few of whom can be found in every community? Not at all!—not at all! They are doing what they have done in many past conventions. They come trustingly, confidingly, only to be again amazed, overwhelmed at the audacity of the veteran gang, the politician and his little candidate. It is too late to fight. What can a small group of honest men do against the battle-scarred veteran of many political fights? They go home in disgust, vowing to keep away from such assemblies again. The good men are becoming more and more rare at our medical conventions. The number of hungry, aye, ravenous politicians is increasing; their voices grow louder, and modest merit hides its face and blushes.

"But," asks some one, "what good can this do the politician?" We answer, that a large part of the world, that part from which the politician derives his sustenance, is ignorant of the true inwardness of medical associations, and their attention is called to these men whom their profession delight to honor. These modest men are not slow to inform their friends and the world at large how they have been chosen above the many. And how natural it is for the deluded world to think that it is their professional merit that has brought them to such a pitch of greatness.

Every one can not be a medical politician any more than a ward heeler. There are certain qualities which must be born to him, others must be acquired, and all must be blended to make an harmonious whole. Given the proper qualfications, natural and acquired, and a few conventions of experience, and we have a figure unique, but alas! too common in medical societies. A type? Let us see. He must be bright with a superficial brilliancy that deceives those of less intelligence. He must know a little of every thing, and be wise enough not to venture beyond his depth unless he is certain that his hearers know much less of his subject than he; then he can flounder around in shallow water, and they will believe he is swimming far out into the ocean.

He has a practice, of course—such men always will—and usually a good one. Was it not Aristotle who said, "*Mundus vult decipi*"? He is usually a jolly fellow, with a bright, pleasant laugh, and ready to please by using it. He can listen to an old story as if he never heard it before, and tell you a new one that he has carefully treasured up for just such an occasion. He is usually a liberal fellow in money matters, and when you are visiting the city in which he resides, he will treat you royally; he will dine you and wine you, and stay out late with you, while you, living in the country can do nothing for him—except send him your patients and vote for his man. He has a great deal of tact—tact is his strong point. If you are a churchman, he can talk theology, morals, and sentiment from a lofty pedestal, and you will look up and say, "Ah, McClung is indeed a great man!" But if you are a little worldly—if, when away from your routine work you wish to break the monotony of your life by adventures wild and weird, deeds of darkness and acts that must not be told at home—beware! he has got you sure—he will own you forever, and you will be a willing slave. He really does know how to have a high old time. He can take you where the cuisine is of the finest, and the wiskey is the oldest, and the Cyprians are the youngest. When you, weary and worn, meet him at his office next morning, he is fresh and charming, his smile the most attractive, his hand-shake the most cordial.

Scarcely are you at home when the mail brings you his last reprint, and in ten days another, a week after a third, until you are forced to stay, "McClung is a smart man—an industrious man—a very learned man."

Have you ever taken up the reprint for a critical reading? If so, you will be surprised by these facts: first, how many pages can be written without conveying any meaning; second, how many axioms in medicine the writer can lay before you as facts discovered by himself, and third, how much and how boldly he can steal from other writers and not give them credit. The writ-

er remembers to have gone, some 10 or 12 years ago, with an honest old practitioner, to hear one of these politicians deliver before a medical society a "lecture" on a medical subject; we had seen several notices of the intended "lecture" in the daily papers, although for years previous a "paper" had been read before that society every week. We listened patiently and attentively to descriptions which were old in Galen's time, to differential diagnoses which Paracelsus would have laughed at. But when he came to treatment, and advised measures that have been accepted as necessary since the dawn of medical science, when he rolled out sonorous platitudes, axiomatic truths with all the force and energy, with all the earnestness and impressiveness of a new discovery, it was too much for the venerable gentleman (now long since gathered to his fathers), and he grew restless, and soon slipped out of the hall, the writer following him.

We walked in silence for some time, until the writer asked him timidly how he liked the profound method of treatment which the brilliant and original "lecturer" had recommended. The answer was curt and sharp. "It was," said he, "like saying that when you circumcise a man, always cut off his foreskin." Yet a great majority of those who heard the "lecture" were taken in by the undoubted oratorical powers of the speaker and the impressive earnestness with which he told his intelligent audience that two and two made four. They thought the "lecture" was unusually good, and stayed away from the next meeting, when a deep thinker and original investigator read a paper that would really have taught them something.

As we skim over the vast amount of medical literature contained in the journals we are all too apt to think that he who writes most knows most, and taking advantage of this fact the medical politician fairly revels in articles. If he can only evolve something from his inner consciousness or discover in his superficial reading one little fact that you did not know before, you will believe that in his massive brain are hidden other and mightier secrets, the result of indefatigable labor. To those who are not thrown into daily intercourse with him, our medical heeler may appear genuine and a man of mark. To those who meet him often, who hear his papers read at local societies, who see his *suaviter in modo, dulciter in re*, and above all his actions in medical conventions, he appears in his true colors, a selfish impostor, a medical adventurer, an obstacle to the advance and dignity of the profession.

It is the medical politician who seizes upon young Dr. Rusticus, and after the usual friendly greetings, flattering from one so great, gently insinuates that Dr. Loomis is an old mossback, and not fitted for the presidency—that Dr. Flint is a fossil, while Dr. Gross is a hundred years behind the times. "What we need," he goes on to say, "is a progressive young man, one who has worked hard for the society, and McClung is your man."

What shall we do to awaken a real interest in medical societies, to get back the men of real knowledge and experience, who are now conspicuous by their enforced absence? It must be evident to any close observer that the first and most imperative action must be the expulsion of that pestilential creature, the medical politician. He only seeks self-aggrandizement; deprive him of it. His papers are either vapid or stolen; expose him; hold him up to ridicule or scorn. Do not allow yourself to be guided entirely by your sympathies. Use your vote as intelligently as you do in the affairs of the nation, and vote for no man for any office who by his dignity, honor, and intelligence is not fully able to fill it. Spurn any man who directly or indirectly solicits your help to office; reject any one who is so hopelessly entangled in cliques that his judgment and official acts are bound to be biased. Show your contempt for the medical politician, and ask yourself, the physician, what do I owe him as a physician?

When these things are done, your meetings will be quiet and orderly, and will fulfill the object for which they are intended. Your active members, your speaking and reading members will be those who have contributed most to the noblest of professions, learned and honorable gentlemen, compared to whom your medical politician is as the scum of the earth.

THE NECESSARY PEROXIDE OF HYDROGEN.

BY ROBERT T. MORRIS, M.D., NEW YORK.

Read in the Section of Surgery and Anatomy, at the Forty-First Annual Meeting of the American Medical Association, held at Nashville, Tenn., May, 1890.

Stop suppuration! That is the duty that is imposed upon us when we fail to prevent suppuration.

As the ferret hunts the rat, so does peroxide of hydrogen follow pus to its narrowest hiding place, and the pyogenic and other micro organisms are as dead as the rat that the ferret catches, when the peroxide is through with them. Peroxide of hydrogen, H_2O_2 in the strong 15 volume solution, is almost as harmless as water, and yet, according to the testimony of Gifford, kills anthrax spores in a few minutes.

For preventing suppuration, we have bichloride of mercury, hydranaphthol, carbolic acid, and many other antiseptics, but for stopping it abruptly and for sterilizing a suppurating wound, we have only one antiseptic that is generally efficient, so far as I know, and that is the strong peroxide of hydrogen. Therefore I have qualified it, not as "good," not as "useful," but as "necessary."

In abscess of the brain, where we cannot thoroughly wash the pus out of tortuous canals without injuring the tissues, the H_2O_2, injected at a superficial point, will follow the pus, and throw it out too in a foaming mixture. It is best to inject a small quantity, wait until foaming ceases, and repeat injections until the last one fails to bubble. Then we know that the pus cavity is chemically clean, as far as live microbes are concerned.

In appendicitis, we can open the abscess, inject peroxide of hydrogen, and so thoroughly sterilize the pus cavity that we need not fear infection of the general peritoneal cavity if we wish to separate intestinal adhesions and remove the appendix vermiformis. Many a patient, who is now dead, could have been saved if peroxide of hydrogen had been used when he had appendicitis.

This single means at our disposal allows us to open the most extensive psoas abscess without dread of septic infection following.

In some cases of purulent conjunctivitis we can build a little wall of wax about the eye, destroy all pus with peroxide of hydrogen and cut the suppuration short. Give the patient ether if the H_2O_2 causes too much smarting. It is only in the eye, in the nose, and in the urethra, that peroxide of hydrogen will need to be preceded by cocaine (or ether) for the purpose of quieting the smarting, for it is elsewhere almost as bland as water.

It is possible to open a large abscess of the breast, wash it out with H_2O_2, and have recovery ensue under one antiseptic dressing, without the ormation of another drop of pus.

Where cellular tissues are breaking down, and in old sinuses, we are obliged to make repeated applications of the H_2O_2 for many days, and in such cases I usually follow it with balsam of Peru, for balsam of Peru, either in fluid form or used with sterilized oakum, is a most prompt encourager of granulation.

If we apply H_2O_2 on a probang to diphtheritic membranes at intervals of a few moments, they swell up like whipped cream and come away easily, leaving a clean surface. The fluid can be snuffed up into the nose and will render a fœtid ozœna odorless.

It is unnecessary for me to speak of further indications for its use, because wherever there is pus we should use peroxide of hydrogen. We are all familiar with the old law: "*Ubi pus, ibi evacua,*" but I would change it to read: "*Ubi pus ibi evacua, ibi hydrogenum peroxidum infunde.*" That is the rule. The exceptions which prove the rule are easily appreciated when we have them to deal with.

Peroxide of hydrogen is an unstable compound, and becomes weaker as oxygen is given off, but Marchand's 15 volume solution will retain active germicidal powers for many months, if kept tightly corked in a cool place. The price of manufacturer's preparation is about 75 cents per pound, and it can be obtained from any large drug house in this country. When using the H_2O_2 it should not be allowed to come in contact with metals if we wish to preserve its strength, as oxygen is then given off too rapidly.

H_2O_2 must be used with caution about the hair if the color is a matter of importance to the patient, for this drug, under an alias, is the golden hair bleach of the *nymphs du pave*, and a dark-haired man with a canary-colored moustache is a stirring object.—*Journ. Amer. Med. Ass'n*, Aug. 9, 1890.

CHARACTERISTIC EFFECTS OF THE VICHY WATERS.

In a recent brochure upon the action of vichy water, Dr. Durand Fardee, of the Academy de Medicine de Paris, says: Their characteristic effects are two-fold:

1. Alterative or diathetic, in conditions marked by an imperfect assimilation of the alimentary principles furnished by the ingestion of the albuminoids (gout and uric acid gravel—diabetes—obesity).

2. A resolving action in all the engorgements or congestions of the tissues and organs pertaining to the abdominal and pelvic regions.

The secondary effects are upon: (1) The hepatic system. (2) Dyspepsia.

The vichy waters, therefore, have a medicinal action upon the processes of assimilation and resolution, and upon the liver and digestive apparatus.

Gout; Acute, Articular, Regular Gout.—The results to be expected, namely, diminution in severity and postponement of the attacks, are better assured the more robust and healthy the constitution of the patient, and the earlier the attack is anticipated by beginning the treatment.

Uric Acid Gravel.—Cessation or amelioration of nephritic colic is accomplished, provided the kidneys are intact. The calculi become smaller or even disappear, and thus are eliminated without provoking painful symptoms.

Obesity.—Visceral obesity, that is to say, of the chest or abdomen, is very positively relieved. The effect is less pronounced upon the accumulation of fat in the peripheral regions.

Diabetes.—Especially in alimentary diabetes and in those forms associated with obesity. A rapid improvement of all the symptoms is effected, together with a considerable reduction or disappearance of the glycosuria. A subsequent reappearance of the latter symptom in constitutional diabetes does not in general reproduce the previous disturbance of health, which may perhaps remain in a satisfactory condition for a very long time, provided the treatment be repeated occasionally.

Biliary Calculi and Hepatic Colics.—A considerable improvement is the rule, and frequently a complete cure is obtained.

Congestion of the Liver.—In simple congestion, chronic hyperæmia, the early stages of cirrhosis of alcoholic or malarial origin, or dependent upon venous stasis of the abdominal viscera.

Cachexia.—In malarial cachexia or in that catarrh of warm climates, and the sequelæ of dysentery.

Dyspepsia of the atonic variety, or that caused by insufficient secretion of the gastric or intestinal glands.

A Resolving Action upon most of the congestions of the abdominal or pelvic regions, with the exception of scrofulous adenitis.

Resolution.—Of congestion of the spleen, of simple congestion of the walls of the stomach (and also of

simple ulcer of this organ), of such intra-abdominal tumors as are capable of undergoing this process, iliac and peri-uterine abscesses, and also of congestion of the uterus.—*Am. Prac. and News.*

EARLY RISING AND LONGEVITY.

Professor Humphry's recent Collective Investigation Report on Aged Persons, contains some very positive evidence on a matter which has already engaged the attention of moralists as well as physicians. "The opportunity for nutrition to do its restorative work was in nearly all provided by the faculty of 'good sleeping,' to which was commonly added its appropriate attendant, the habit of 'early rising." Thus there is a relation between early rising and longevity. No doubt many people will hastily seize upon the sentence just quoted, and employ it in edifying lectures or essays for the perusal of youth, or embody it in popular medical works. Important qualifications follow in Dr. Humphry's report, but they are likely to be overlooked. Doubtless the habit of early rising is, in itself, healthy; most of all, it is a good sign of health when it evidently signifies rapid recovery from fatigue. Again, it usually denotes a strong will, the gift, as a rule, of a good physical constitution, or at least the safeguard of average bodily strength. Late risers are generally either invalids or persons of bad habits, idlers who are never free from other vices besides idleness. The nervous exhaustion which keeps a man wakeful throughout the small hours produces sleep late in the morning. This exhaustion is invaribly due to one of several life-shortening influences, especially anxiety or indiscretion in diet or drink. Early rising is thus rather one effect of certain favorable influences, another result of which is longevity, than a cause of longevity. To turn a weakly man out of bed every morning at seven o'clock will not prolong his life. It will be noted that by "good sleeping" Professor Humphry signifies quick sleeping, "that is, the reparative work which has to be done in sleep is done briskly and well." Here, again, we have an effect of a cause; but preventing a weakly subject from sleeping more than four or five hours nightly would not cause him to live long, but would rather tend to shorten his life. Equally important are Professor Humphry's observations which show that by "early" he does not entirely mean the time by the clock. The word "has a relative significance with reference to the time of going to bed. A person who retires to rest four hours after midnight and gets up at 10 A.M. may be strictly regarded as an 'early riser." Thus, early rising is synonymous in long life histories with short sleeping, which means rapid recovery from fatigue, a sign of bodily strength. These scientific facts in no wise contradict the alleged value of early rising as a practice to be cultivated by all persons in good health. It is excellent as moral discipline, and eminently healthy as a matter of fact. Most persons will eat three meals daily. When a man gets up late those meals will probably follow each other at too short intervals to be wholesome. When he is an early riser it will probably be otherwise. He can enjoy a good breakfast, and by the time for his lunch or mid-day dinner he will have an honest appetite again.—*Br. Med. Jour.*

WHEN SHALL WE USE HYPNOTICS?

In acute disease, particularly fevers, sleep is often a necessity, reducing the activity of the heart, removing more waste, and quieting the general excitability of the nervous system. In chronic disease there is frequently the same temporary need. In incurable disorders with pain and discomfort, in the restlessness of senility, hypnotics and narcotics—and used freely in the last years of life—are almost the chief justification of our service. Often in mental disease they are, for a time, all but indispensable. In some neurotic people their occasional use can hardly be avoided. In acute nervous and mental disturbance from profound shock, full and continued doses of narcotics may dispel most threatening symptoms. The individual must, of course, be taken into consideration. Many can be depended upon to use hypnotics only as directed by their physician; others can no more be trusted with them than certain persons with alcohol. Something of slight intrinsic hypnotic value may be intensified by its mental effect, and I am sometimes deliberately asked for a prescription upon which to build a mindcure. It is often imperative to prescribe a hypnotic, where it is best that a decided hypnotic effect should not be got. For this purpose a somewhat unpleasant drug is better than an altogether agreeable one, and the prescription which I use consists of a few minums of paraldehyde in a drachm of chloroform water. This can be repeated in the night several times, and be continued without harm.

In some conditions, even with acute maniacal symptoms, it is better to let the patient lie awake almost absolutely for two or three nights than give the amount of narcotics necessary to produce sleep.—Dr. Folsom, in *Boston Med. and Surg. Jour.*

Treatment of Consumption.—It is reported that Dr. W. H. Burt, of Chicago, has recently proposed hyper-alimentation and the drinking of very large quantities of water as a cure for consumption. Eight months ago, when reading of the change brought about in the obesity of Prince Bismarck through refraining from the use of water and carbo-hydrates, it occurred to Dr. Burt that an opposite treatment ought to result in the cure of all wasting diseases. He now states his belief that excessive eating and the excessive use of water will cure fifty per cent of all consumptive cases in their first and second stages. He explained at length the tonic influence and power in building up tissue

possessed by water, which forms three-fourths of the human body, and said that even in health six pints a day were necessary to meet the water waste, and in disease twelve pints.

At a recent meeting of the Chicago Medical Society he is said in the daily papers to have pronounced the bacteria theory, so popular of late, to be pure nonsense. The treatment he proposed consisted in the free use of water every hour in the day, nine hours' sleep regularly, and if possible, the sea or mountain air. Above all, the patient must look upon the drinking of water as his life. Regarding heredity as the great danger, Dr. Burt advocated the passing by Congress of a law forbidding the marriage of consumptives. With this in force, one hundred years from now, he thought, consumption would not exist in the United States.—*Am. Prac. and News.*

Prof. Keen gave the class the following table to remember when making a differential diagnosis between dislocation and fracture of the neck of the femur:

Fracture of Neck.	Dislocation.
1st. Old persons, as a rule.	1st. Adult middle life.
2d. In women more frequently.	2d. Either sex (men more frequently.)
3d. Slight force.	3d. Severe force.
4th. Eversion of toes.	4th. Inversion of toes (usually.)
5th. Shortening in both.	5th. Shortening in both.
6th. If you restore to position displacement recurs.	6th. If you restore to position displacement does not recur.
7th. Usually crepitus.	7th. No crepitus.
8th. Preternatural mobility.	8th. Preternatural immobility.
9th. Slight prominence of great trochanter.	9th. Great prominence of great trochanter.

He also gives this table as a differential diagnosis between intra and extra-capsular fracture of the neck of the femur:

Intra-Capsular.	Extra-Capsular.
1st. Slight injury.	1st. Severe injury.
2d. Rarely severe contusion.	2d. Usually severe contusion.
3d. Shortening increases.	3d. Remains the same.
4th. Crepitus feeble and sometimes absent.	4th. Crepitus distinct.
5th. Leg nearly (but not entirely) helpless.	5th. Entirely so.
6th. Shortened radius of rotation.	6th. Still more so.
7th. Pain tolerably severe.	7th. Extremely severe.
8th. Usually occurs in persons over 50 years of age	8th. Usually occurring in persons under 50 years of age.
9th. More frequently in women.	9th. More frequently in man.

—*Col. and Clin. Rec.*

Bad Breath.—Dr. Frank H. Gardner, in the *Dental Review*, speaks of the causes of bad breath. He concludes: First, decaying particles in the mouth as far back as the pharynx-vault taint the breath, if exhaled, very little if at all. Second, mouth-breathers have a bad breath when the tonsils are enlarged, or when cheesy masses exist in the tonsillary mucous folds. Third, certain gastric derangements taint the breath only when gases are eructated through the mouth. Fourth, the principal cause of bad breath is decomposion in the intestinal canal, the retention of fecal matter in the transverse and descending colon, and the absorption of gases into the circulation, finally exhaled by the lungs. Fifth, catarrh, nasal, pharyngeal, or bronchial, causes bad breath. Sixth, medicines or aliments which undergo chemical changes below the œsophagus may, by rapid absorption through the stomach walls, or immediately below, give to the breath the characteristic odor. Bad breath is often a source of serious annoyance to the patient, and the fact that it has more than a local cause is too often ignored by the physician, who therefore fails to cure it.—*Buffalo Med. and Surg. Journal.*

Erratic Pain in Labor.—At the meeting of the Virginia Academy of Medicine and Surgery, held July 8, 1890, at Richmond, Va., Dr. Johnston reported the following case:

Dr. Johnston had been called, fifteen or twenty days before expected delivery, to a woman, the mother of four children (good labor each time), who complained of a severe pain, paroxysmal in character, occurring on the right side of the neck, and extending down upon her chest to the margin of the axilla. Suspecting the approach of labor, he asked for an examination, but was refused. Early the next morning he was called again, and found the child born. The pains had increased in length and intensity, the intervals growing shorter, until suddenly there was a gush of waters, the birth of the child immediately following. The woman had not a single uterine or abdominal pain, and did not, in the least, suspect the real condition of affairs.—*Virginia Medical Monthly.*

The Treatment of Dyspepsia by Cannabis Indica.—At the Academie de Medicine, M. Germain Sée read a paper on the Treatment of Dyspepsia and Certain Other Gastric Affections by Cannabis Indica. He said that the drug should be employed in the extract, at the dose of one-third of a grain three times a day. It acts by suppressing the painful sensations experienced after the ingestion of food, and excites the appetite. However, when an excess of hydrochloric acid is present in the stomach, large doses of bicarbonate of soda should be given at the end of the digestion in the stomach; that is to say, four hours after food had been taken. The Indian hemp had no effect on atony or dilatation of the stomach, but it acts favorably on spasm and vomiting of a nervo-motor origin. In the case of pyrosis the effects of the drug were very pronounced. In conclusion, M. Sée said that cannabis indica was an effectual sedative to the stomach.—*Medical Press and Circular.*

Amenities of Medical Practice in South Africa.—A native fetiche-man in South Africa has just had an experience which should convey a moral to his col-

leagues. The favorite wife of one of the chiefs in the district was taken very ill, and the fetche-man declared that the only cure was the ingestion of fat from the human heart. The chief on looking around concluded that the heart of the doctor was most likely to furnish the amount of adipose required, and ordered him to be killed, which order was promptly obeyed, and the fat of the heart given to the afflicted chieftainess. The other parts of the body usually eaten by cannibals were, it is said, eaten by the healthy members of the chief's household. The inhuman chief has been placed under arrest by the district magistrate pending a full inquiry by the Government officials.—*Hospital Gazette.*

A New Test for Albumen in Urine.—The following tests have been published by Zouchlos (*Rundschau*, 1890), and are recommended on account of their simplicity and accuracy: A solution of 1 part of acetic acid and 6 parts of 1% solution of corrosive sublimate is prepared; to this the suspected urine is slowly added, which at once produces a distinct cloudiness. This test is not affected by peptones, uric acids, or the phosphates. A still more delicate test than the above has been proposed by Zouchlos: Three ounces of a 10% solution of rhodium potash, with 6 drams of acetic acid; of this a few drops are added to the suspected urine. If albumen is present, there is at once formed a distinct cloudiness, which is insoluble in excess of the solution.—*Virginia Medical Monthly.*

The Clothing of Young Children.—Mrs. Waller, in the *Nineteenth Century*, pointed out that it is still too much the custom to leave the upper part of the chest and the lower part of the abdomen exposed, and that hence come pulmonary affections on the one hand and bowel complaints on the other. "It is a fact that not only has the child less power of generating heat than the adult, but that it has also a much larger surface in proportion to the mass of its body, and will consequently be far more susceptible to cold. Cold feet cause a large amount of indigestion, and exposure of the large blood-vessels of the thigh during childhood frequently sows the seed of kidney diseases to develop in after life.—*Lancet.*

Phenomenal Weight.—Thd *Medical Press*, July 30, 1890, says that on July 26, a girl, æt. 19 years, died at Plaisance, near Paris. The girl was of an enormous size. A year ago she was weighed, and was found to exceed 470 pounds, and since then she had considerably increased. Around her waist she measured two yards and a half, while the circumference of her arm exceeded one yard. Last year it was proposed to exhibit the girl; but eight men were required to remove her from her room; and as she could not pass through the door the affair was abandoned. She succumbed to erysipelas, and a special case had to be made to contain the body, and finally it had to be passed through the window.

USEFUL FORMULÆ.

The following formulæ are taken from the *Western Druggist:*

Anti-Mosquito Powder.—

℞	Eucalytol,	parts,	5.
	Talcum,	"	10.
	Cornstarch,	"	85.—M.

Especially adapted for parties camping out. It may be rendered more effective by replacing 50 per cent or more of the starch by naphthalin.

Protective Lotion Against Insect Bites.—

℞	Acetic ether,	parts,	5.
	Eucalyptol,	"	10.
	Cologne water,	"	40.
	Tinct. insect powder (1:5)	"	50.—M.

Before applying to the exposed skin dilute with 3 to 6 parts of water.

Composition for Fly-Paper.—

℞	Resin,	parts,	60.
	Linseed oil,	"	36.
	Yellow wax,	"	4.

Moth Poison.—

℞	Oil patchouli,	drops,	5.
	Naphthalin,	"	20.
	Carbolic acid,	"	20.
	Camphor,	grs.	50.
	Oil turpentine	drops,	5.
	Alcohol,		℥j.

Mix well, filter. Moisten a little filtering paper with the essence, and place it between the woolen fabrics or furs to be preserved. Then pack away in a cool place. —*B. and C. Drug.*

Antiseptic Dentifrice, Vigier.—

℞	Resorcin,	grams,	2
	Salol,	"	4
	Prepared chalk,	"	8
	Orris root,	"	40
	Carmin, No. 40,	"	0.3.

M. If desired, 10 drops of oil peppermint may be added.

Endometritis.—For subacute cases of this disease Terrier uses medicated pencils introduced into the uterus. He recommends:

℞	Iodoformi,	grs. cl.
	Gummi tragacanth,	grs. vijss.
	Glycerini,	
	Aquæ destill.,	aa q.s.

Ut fiant bacilla (pencils) No. 10.

The pencils made according to this formula are said to be about the size of a stick of nitrate of silver. Resorcin or salol may be used instead of iodoform.—*Canada Lancet.*

ORIGINAL ARTICLES.

PUBLIC HEALTH AND THE LAND QUESTION.

BY GEO. HOMAN, M.D.,

Secretary State Board of Health of Missouri; Professor of Hygiene and Forensic Medicine, St. Louis Medical College.

Read at a Meeting of the St. Louis Medico-Chirurgical Soc ety, June 10, 1890.

There are probably many people who would deny that any taxing system, or plan for raising public revenues, could influence, or have any near or real connection with the public health; but I shall try to show in what follows that this is but a superficial and deceptive view to take of the matter, and that the health interest of populations is affected directly, positively, in uriously, by present wrongs and unnatural conditions that have their strength and support in existing laws relating to land.

It would, indeed, appear to be true that every great social question that cries for an answer, whether of health, safety, or morals, springs from the so and is rooted in the earth—that fruitful source of all the constituents of the human body, and of the products needful for its full and perfect work.

Said the Indian chieftain, "The sun is my father, the earth is my mother; will repose on her bosom." The primitive idea of aboriginal man regarded the earth as a nourishing common mother whose ample bosom was the sufficient source of all good things needed by mankind, in which possession all had an equal share and right, and which could not be alienated or wrongfully invaded by another.

This early idea of nourishment and repose is further illustrated by the story of the fabled Antæus, son of sea and earth, who when felled in conflict, at once received new strength each time he was laid, prostrate and rose to fight again with freshened vigor. An early legend of the Norsemen carries the same idea, the slain rising whole at daybreak, after a night's healing contact with the earth, to wage anew the endless battle.

But the natural laws concerning land, based on instinctive right and justice among primitive peoples, have been deliberately violated and selfishly perverted by civilized man, and out of a corrupted land policy is begotten a train of ills that will not be cured until a return to first principles is had, and the people of to-day learn the lesson to do justice one to another.

The swarming populations that crowd industrial centers are denied their natural right to comfortable and wholesome conditions of bodily living; through selfish greed and sinister avarice their birthright to liferoom and vital comfort is abridged, and their lives to all intents escheated into hands, living or dead, that hold the land in their clutches and forbid under the pains of trespass the use of that element which nature has so abundantly provided for all.

As man is a land animal—all his prime physical wants centering in the earth—a privation of his right to the use of land prejudices his health, for with land goes fresh air, sunlight and other wholesome bounties of nature; but where the bar to unused land prevails and a considerable population gathers, the result of necessity is to crowd them closer and closer together, to hinder their freedom of movement from place to place, and make them the dependents of him who is able to control the surface of the earth on which they are permitted to move and breathe.

The man who exercises this control is the landlord, and the circumstances of wage workers, and the conditions of industrial life generally have, in many instances, been so warped to the interests of employer or landlord that from a public health standpoint the industrial slavery of to day is a vastly wider and graver question than any that arose in this country as a result of human chattel slavery in the South a generation or more ago.

No habitual conditions of overcrowding that sapped vigor and destroyed life presented themselves in those days; the pecuniary interest of the slave lord forbade the destruction by preventable diseases of the industrially potent, or merchantable man, woman or child.

But, viewing the sanitary situation as it commonly presents itself to-day, what care for health has the manlord, or landlord (the terms are nearly synonymous), after the wage is paid or rent received? What responsibility for his wholesome keeping follows the chattel of to-day to his home, if such it may be called?

Through stress of competition for work, or through adroit control of the labor market, the employer becomes in fact a man-lord, owning the labor of those in his employ, and having the positive advantage over the slaveholder of no pocket loss in case of sickness or death from disease among his workmen. He shrewdly applies a certain principle of taxation to human flesh, although he might be distressed at the thought of the application of the same principle to land.

The necessities of a family looking to him for bread, or the difficulty of getting employment elsewhere, or other causes, may serve to bind the workman to the service of his employer with the strength of iron bands, and at a price practically fixed by the latter, especially if it be in lines of unskilled labor, or employments requiring little skill, wherein the competition for work is always greatest.

Out of this condition of serfdom at its worst under present laws, escape is nearly hopeless, and to, it is added thralldom to the landlord for the privilege of precarious roof and shelter.

Of necessity, the housing afforded by coercive wages is of the poorest and cheapest kind; and with more mouths to feed the more squalid the surroundings, and the more desperate in a social and sanitary sense the situation becomes.

The sole recourse usually is to the tenement where, heaped floor above floor, in a tainted atmosphere, or in low fetid hovels, amidst poverty, hunger and dirt, in foulness, want and crime, crowded humanity suffers, and sickens, and perishes; for the landlord here is also the air-lord, the lord of sunlight, lord of all the primary conditions of life and living; and these are doled out for a price, failing which the wretched tenant is turned out to seek a habitation still more miserable.

Such in brief is the genesis and growth of municipal slums, those hotbeds of disease and social jungles, in whose miasms infections have their home; where in darkness, damp and dirt, lurk and breed and prosper the trinity of major plagues, that most distress and destroy our kind—tuberculosis in all its forms, diphtheria and scarlet fever.

It has been said that ignorance begets filth, and filth begets disease, and disease begets sin, and sin begets crime; but how, under the conditions sketched, is this dread sequence to be avoided? What instruction in the necessity of care and cleanliness for the avoidance of disease can be addressed to despairing parents or half-famished children—famishing for want of everything wholesome? Must not the remedy reach farther back and strike deeper than that? Must it not cut to the root of the false and dangerous social, economical and industrial system, out of which such evils arise?

With multiplying populations these grievous conditions tend to become more nearly universal throughout the laboring world, through the play of forces now at work, than was ever possible in the time of black slavery.

The centers and localities into which so large a proportion of the laboring population is crowded through force of present laws, are in every city the dread and despair of sanitarians. There the most feared and fatal domestic scourges are active, and tend continually to spread with epidemic energy. The labor of sanitary officials in dealing with the problems and conditions there presented is not unlike the despairing toil of the nearly exhausted crew of a leaking ship in mid-ocean to keep it afloat by bailing and pumping. Their best efforts in either case are merely palliative; they do not reach the seat of the trouble.

The sickness and death rates among tenement house populations are excessive, and especially so among young lives. Even in this city, which should be, and doubtless is, one of the healthiest of its size to be found anywhere, the deaths last year of children under five years of age amounted to nearly forty per cent of the total mortality, more than 2,000 dying under one year of age, and in many cities a relatively much higher proportion obtains.

An Episcopal bishop in New York, in an address published during the present year, outlines certain conditions as follows:

"A civilization · · · which overtasks or underpays wage workers in order to add superfluous affluence and irresponsible power to the estates of a few; which helps a hundredth part of the population to own half of the property; which exposes innumerable women to moral ruin for a living; which drives pale and emaciated and rickety children daily from pestilential tenements to factories and mines; which countenances · · · an owner of real estate who has pocketed $4,000,000 by the rental of four nests of misery and dens of vice, five stories high; which lets 15,000 children die within a year after they were born in these cellars and garrets, without uttering a sound of indignation or alarm; which robs the citizen · · · of his independence and manliness · · · enslaving him by fear or want to a landlord or employer; which increases the rate of suicide and insanity every year; · · · where in most industries 'one man is master and many serve,'" etc.: This, truly, is not a civilization for any conscientious, thinking man to be proud of.

A high birth rate prevails in these crowded and oppressed populations, the aim of nature appearing to be to meet the enormous life waste and margin against extinction; but of the vital or moral quality of offspring thus produced but little can be said, and as little reasonably expected. Tenement districts are known to police officials as nurseries of crime, as they are known to sanitary authorities as breeding places of disease. Large numbers perish early, and of those who struggle through to adult life many are stunted and crippled and deformed in body or mind, or both, and usually, sooner or later, become inmates of hospitals, reformatories, poor houses, or prisons.

The march of cholera around the world, an outbreak of Oriental plague in Russian dominions, a flurry of smallpox here and there, the spread of yellow fever from its Cuban cradle, the classic terrors of leprosy, all arouse public interest, fix attention, and cause for a time a degree of alarm and spasmodic activity in the way of arrest and prevention; but as factors of human disability and death, their influence is almost insignificant when compared with the eternal gnawing at population, bone and sinew by diseases that are domesticated in all civilized lands, mainly through the existence of conditions contraband alike of the common health, the common safety, common justice and common humanity.

Among the squalid habitations of the poor these diseases "walk in darkness and waste at noonday;" but what escape from them has the poor man with his family chained by iron necessity to his wretched surroundings? Said Harold, the Saxon, to the Norse invader in words of notable defiance: "He has said what he will grant King Harold Sigurdarsson; it is a space of seven feet, and it is so long because he is taller than most other men." Thus to a foe who was wasting the land, but less consideration than this even does modern society grant the toiling man—him who creates wealth by the application of his labor to the earth or its products, and upon whom, by the best authority, the only true prosperity of a country depends. He may see, as he passes to and from his daily toil, plenty of land that no man is using, but what is that to him? Living, he can hold only what his foot may cover, and dead, he finds scant elbow room in Potter's field.

In a public health sense, however, and in retribution to society, there is this remaining, that often rich and poor fall before the same diseases, an "even-handed justice commends the ingredients of our poisoned chalice to our own lips," and sometimes ordains that the returning weapon shall slay him by whose hand it was projected.

"The eternal laws of ustice bind
Oppressor and oppressed;
And, close as sin and suffering joined,
They march to fate abreast."

A dense and stifled population feels the first strokes and bears the brunt of pestilence developed by and springing from over-crowding, poverty and filth; and under such circumstances it is an almost impossible task on the part of public health officials to isolate and keep separated the sick and the well in order to check its progress. Even if the people worked heartily with the officials, and they seldom do, in their efforts to control and stamp out the epidemic flame, the paths which infection travels are so many, crooked and hidden, contact and intercourse, direct and indirect, between all classes and communities are so close, that though the house of wealth be ringed with fire still, sooner or later, contagion may come, and often with more swift and fatal effect than to the poor, who, by habit and usage, have, perhaps, gained a degree of tolerance of population poisons.

It is well that breaches of natural laws bring their own punishment, be it slow or swift, as the case may be; that the superstition which would lean on miraculous power to stay the march of disease finds scant support to day; that water will wet and fire will burn those who fall into them; that faith can stop neither bullets nor bacteria; that if we continually grow and sow the seeds of disease and death, we shall just as surely reap the appointed harvest, for in no other way, perhaps, can the blind and selfish greed of man be taught the exceeding gain of justice and fairness, the profit of right doing to all.

If by a readjustment of our laws we can put away this social and sanitary reproach, and shatter the evil forces that crowd human beings into pestilent habitations and conditions that not only sap their health and cut short their lives, but are a perpetual menace and danger of the same sort to all in the community, and to other communities and peoples, the problem of population hygiene would become vastly more simple, and a great step be taken toward the final up-rooting of the maladies that now waste, weaken and destroy mankind.

The increasing tendency of wealth is away from the hands of the toiling many who produce it into the hands of the few, who, by favor of discriminating laws and the material power such favor brings, are enabled to hold and monopolize large areas of land and shut out from them whom they will; and this monopoly of a natural bounty necessary to life, repugnant alike to fundamental right and justice, operates more and more continually to produce massing of population, with all the evils to body and mind that spring from human overcrowding.

And herein is the bearing of the land question on the public health question; for, given as true the forces that mass populations within limits too narrow for health or safety, then the primary remedy would be to release the land from the grip of those who hold but will not use it, and deny to them or any man or combination of men the right to exact tribute from other men for the privilege of living—which right of tribute and control enables the landlord to reap usurious gain out of the necessities, the sufferings, and the lives of his fellow creatures.

As has recently been well said, "The difference between the ownership of a man and the ownership of that element on and from which he must live, if he is to live at all, is one of degree and not of kind. · · · If we · · · look at things as they are, we shall see that necessity is an effective whip-lash, poverty a heavy ball and chain, and want a blood-hound which no water can throw off the scent."

Who in present times has ever heard of a public madhouse or prison, poorhouse or hospital being abolished because there was no further need for them? They are never abandoned until larger and still larger structures are provided which still shortly fail to meet the ever-increasing demand. This demand has grown within the present generation beyond all proper ratio to increase of population, and shows that there is a sinister, cankering, insidious cause operating at the very foundation of the social order producing the many-millioned man on the one hand, and multitudinous sick, insane, paupers and criminals on the other.

While the creation of wealth has in modern times been vastly quickened, its distribution has been grossly unequal; the few have been favored to the cost of the many, and through wealth thus gained and the power it gives, the few have acquired control of a vast proportion of the desirable land and can dictate the terms on which their fellow men may use it; and it is mainly by and through the exercise of this unjust power, the power to gain and hold landlord dominion over the surface of the earth, that such deep sanitary and social wrongs to the many are brought about—wrongs which charity and philanthropy can never cure, but which justice and fairness between man and man would in time eradicate through laws directed to the cause of the disease, and not to its results.

Just as the whole field of medicine has been lightened and its practice simplified by discoveries in microscopic life, so has the domain of sanitary and social and political economy been illuminated and their several relations made clear by a better and growing understanding of the true position mankind should hold toward the land.

If he who holds the land holds equally power over the health, fortunes and lives of his fellow men through his present right to permit or deny them access to it for their use and support, then the change needed in our

laws is to abolish private ownership in land, on the principle that no man can own as property that which is the natural heritage of all men, which no man or men did anything to produce, which was here when man came, and doubtless will be here when he is gone—and simply to let each individual take that amount of land which he can use, paying or such righ of use into the public funds a sum proportioned to the advantages or opportunities it offers.

This course would abolish landlordism—for the public would receive the rental instead of private individuals, and this rental, as has been carefully estimated and demonstrated, would suffice for all necessary public expenditures of municipalities or states—free labor and the products of labor from oppression and taxation, direct and indirect, shut out from its use no man who desires land, further the public health by a wholesome dispersal of population into separate dwellings, abolish municipal slums and human rookeries, and deal to our commonest and deadliest pandemic infections a crushing blow in the very sources and eat of their power.

The complete freedom of man anywhere is impossible until the land is freed from the possibility of monopoly; and as population health chiefly depends on man's freedom of access to his birthright, that he may enjoy its wholesome advantages and avoid the contact of spreading diseases, land free from landlord domination, is an indispensable condition of public health, as the question presents itself in connection with considerable bodies of people. n the up-rooting and destruction of the vested wrongs to the millions accruing by reason of the present land policy, lie the promise and potency of the realization and confirmation of one of the most sacred rights of man, now through ignorance, selfishness and avarice subverted and ignored, the right of those born into the world to health and comfort and allotted length of years.

THE RELATIONSHIP OF NASO-PHARYNGEAL DISEASE AND CATARRH OF THE MIDDLE EAR.

BY D. EMMETT WELCH, M.D., GRAND RAPIDS, MICH.

Read before the American Rhinological Association, at Louisville, Ky., Oct. 6, 1890.

The relationship existing between noso-pharyngeal disease and catarrh of the middle ear is intimate and inseparable. The ear is dependent upon the healthy condition of the nares and naso-pharynx for the healthy performance of its function. Ophthalmology and otology have long gone hand in hand; yet they have nothing in common and it is erroneous for them to be association ; but to ally otology with rhinology would be furthering the advance of medicine, and the successful treatment of diseases of the middle ear would be more ably accomplished. Thus the pathological connection of these branches could be better subserved and a more favorable prognosis given our patients.

Laryngology as applied has been considered to include rhinology; yet, this is of sufficient importance to be alone, or rather a co-ordination of these fields, for the laryngologist cannot be successful if he eliminates bronchial conditions from his domain. Patients presenting themselves for the treatment of ear diseases always give the story of catarrh: Where located? In the nose and throat; and date their primary impairment to this condition. Therefore it becomes essential not only to become familiar with the speculum, the rhinoscopic mirror, the tuning fork and catheter, and Politzer air bag, but also to detect the diseases of the nares and naso-pharynx, their inflammation and obstructive lesions, and to accomplish their removal. Neither is it encumbent upon the physician to be able to detect only the more pronounced abnormalities of the nares and naso-pharynx, but he must be able to detect the slightest deviations and correct them as well.

The existence of a spur on the septum may be the means of exciting a tinnitus aurium—and how useless a direct medication to the ear would be without its removal!

It would be entirely erroneous for the rhinologist to ignore the large number of aural complications he meets with in daily practice; this is very apparent indeed when we consider that the larger proportion of abnormal changes that take place in the ear result from those diseases of the naso-pharynx which produce narrowing or obstruction of the Eustachian tube.

The rhinologist and otologist have waged war against each other, each claiming a protectorate in his own particular "ism", the former by his treatment alone and directed especially to the naso-pharynx obtaining success; the latter, condemning him, in that failure has occurred, due to unfamiliarity with other diseases of the ear; hence it is better and our results are more satisfactory if the medication be applied conjointly to the nares, naso-pharynx and the ear.

In all cases conservatism should prevail, and if failure accrue it is then that our surgical means may be of avail, by not only restoring the parts to a normal condition, but also acting as aids to hearing and as a prophylactic agent in removing the cause and giving immunity against recurrent attacks.

Repeated attacks of subacute otitis media can be found in causes directly referable to some mechanical obstruction or inflammatory condition of the naso-pharynx. Its relief is dependent upon this causation and its treatment is plain; yet, how often do we find that this primary factor is not detected. The uselessness of direct medication to the ear in such cases is patent. This is best illustrated in cases of children, who, after suffering from recurrent attacks of otitis media, are presented for examination and treatment, when, on inspection, the membrana tympani is found inflamed, the child is suffering from difficulty in breathing, mouth-breathing predominating, the nares are inflamed, and

an adenomatous growth exists at the vault of the pharynx. All treatment with a view to correcting the inflammation of the ear is useless and our only plan is the medication of the nares and naso-pharynx. It is of little importance what plan is pursued in these cases, be it the cautery or snare, the curette or spray medication, but the lesson taught is their relationship and action as co-ordinates or dependents in the results to be obtained. Some writers claim that most cases of chronic non-suppurative catarrh of the middle ear develop from atrophic rhinitis.

But in this climate of Western Michigan, where the changes are sudden and frequent between dryness and moisture, atrophic rhinitis is rare, and instead there is found a condition characterized by excessive secretion of mucus or muco-pus and a chronic inflammation of the membrane. This, in middle and adult life, is so continuous and gradual that whilst the impairment of the sense of smell diminishes, it remains untreated until they perceive a defect in hearing, when, on inspection, the above condition is found, and this defect, due to an extension of the inflammatory process along the course of the Eustachian tube, is disclosed. This condition is not thought of, save in connection with an acute or sub-acute naso-pharyngeal inflammation; whereas in middle life and childhood you will find enlarged tonsils, adenoid vegetations at the vault of the pharynx, or a more diffused form of hypertrophy of the mucous membrane, and this condition extending or continuing, secondary lesions of the labyrinth occur and destroy the hearing power altogether.

The nasal passages, being free from obstruction, the acts of breathing, yawning and respiration aid in properly ventilating the middle ear, restoring the equilibrium of the internal and external atmospheric pressure, which is essential to perfect hearing. But, when obstruction occurs, the acts just mentioned produce a rarefaction of the air in the middle ear, and its effects are similar to that produced by obstructions of the tube, and it is important that this be observed and operative procedures instituted for its relief.

There is another factor which plays an important role with nasal, pharyngeal and aural inflammations, inducing those conditions which primarily have their origin in a proliferative inflammatory condition, producing a great increase in the connective tissue element, and finally ending in contraction and hardening of the same, thus causing sclerosis. This is tobacco.

The nares and naso-pharynx, on inspection, are free from obstructive lesions. Yet the membrane is found to be passively inflamed, with isolated points of a scarlet color, and with that exists the history of excessive smoking and the expulsion of the smoke through the nares and possibly the use of stimulants. To this is added the constitutional effects of the tobacco poison, causing a disturbance of the vaso-motor centers, and thus rendering them more susceptible, by this addition to the disturbing element, and from this effects are produced upon the ear similar to amblyopia and amaurosis.

It is therefore our duty to seek further in the causation of catarrh of the middle ear and to regard it as a factor or a local expression of a remote disease, which is dependent upon an already existing naso-pharyngeal irritant, inflammation or obstructive lesion, whose relief is dependent upon the conjoined medication of the naso-pharynx and middle ear.

Mrs. B., æt. 35 years, consulted me in September, 1885, for deafness, saying: "This has gradually developed for 4 or 5 years; at times I have been able to hear fairly well." At the time of consultation she was unable to hear the watch tick on contact, and was greatly annoyed by roaring sounds in the ear. There was also difficulty in breathing and she was compelled to breathe almost entirely though the mouth. The throat would become dry; at night she suffered from attacks of coughing and in the morning suffered from a dull, heavy headache. On examination of the nares, I found that there was partial stenosis of the left side, with almost complete stenosis of the right side, being able to pass only a very small probe along the floor of the nose to the pharynx. This mass of tissue filled the nares from the lower part of the inferior meatus to the superior: whilst, on the left side, the upper part of the inferior and middle menti were involved. This mass was fibroid in character, very dense and firm.

The membrana tympani was retracted and opaque, without any inflammatory deposits upon it. I cocainized the right nares and passed a long, narrow cautery knife through the center; I found it extended to the posterior portion of the middle meati, when, on using the largest of the knives, I removed the mass completely, and, after several months, I did the same to the right side. When the resultant inflammatory condition subsided, I treated the ear by the Politzer method and the hearing was restored from the hearing of the watch on contact, to hearing it at 20 inches; and there was subsidence of the tinnitus aurium.

Dr. C. consulted me two years ago, suffering from a violent tinnitus aurium and partial deafness. On inspection I found naso-pharyngeal inflammation, not diffuse, but in isolated patches, particularly in the pharynx. The membrana tympani showed nothing abnormal; the watch was heard at 4 inches.

The Doctor suggested that possibly it was due to frequent smoking, as on a previous occasion this had occurred after visiting the clubs and indulging in frequent smoking. To find if this was the exact cause, I advised local treatment with an alkaline solution to the naso-pharynx, and the omission of medication to the ear. This was done and in a short time the hearing returned to its normal condition. Since then, whenever an excess in smoking occurs, the above symptoms are reproduced, but subside after the discontinuance of the use of tobacco.

INTERNAL URETHROTOMY, WITH CASES.

BY J. V. PREWITT, M. D., WEST POINT, KY.

Read before the Mississippi Valley Medical Association at Louisville, Ky., October, 1890.

There was a time, within the memory of most of those present, when internal urethrotomy of the deep urethra was looked upon with suspicion. Many surgeons discarded it altogether as it was so commonly followed by septic or urethral fever. It is a widely claimed fact that in those cases of deep, close strictures there is, complicating the condition, more or less cystitis, causing the urine to be loaded with pus and various micro-organisms. Now, it was claimed, and I now say very justly, that after such operations the urethra was unable to clean itself, and as a natural result there was left in the fresh wound a greater or less amount of septic matter to become absorbed and bring about the long train of toxic symptoms, which would so commonly follow the operation. But to-day I am happy to say that by the late modern antiseptic surgery we are able to control urethral fever and almost entirely keep down the many toxic symptoms which have been the great obstacle and disadvantage to the operation of internal urethrotomy. I have thought it best to give you the treatment and results of the following cases:

Case I.—S. B., section hand, æt. 27 years, called at my office wanting to be treated for gleet of nearly three years standing. This fact led me to make an examination, which showed two strictures of large caliber, one an inch and a half back from the meatus, and another two and a half inches back. History of long standing stricture, getting gradually worse. I operated, cutting with an Otis to 32 French. No hæmorrhage of any consequence and no fever. Gave boric acid internally in ten grain doses. Second day passed 28 F. sound, straight.

Four days later passed the same sound and discharged him. He continued at his work during the time, and as he has been under my constant observation ever since I operated, which was in May 1890, I have examined the case several times since and have been unable to find the slightest recontraction, and no sounds were passed after the sixth day.

Case II.—J. G., æt. 29 years, farmer, came to my office one morning suffering with partial retention of urine, wanting to urinate every fifteen or twenty minutes. He complained of getting no rest at night, as he desired to urinate as often then, if not oftener, than in theday. Had been in this condition for five days, but for the last eight months had passed his urine much oftener than when in good health. Upon examination I found close stricture 5¾-inches back. After hard work of over an hour and a-half I succeeded in passing a filiform. Patient would not consent to an operation. Used rapid dilatation, dilating to 24 F. He then permitted me to operate, which I did, cutting with an Otis to 32 F., afterwards dilating to 34 F., washing out with boric acid. I also gave it internally together with five-drop doses of oil of gaultheria; I had but little hæmorrhage. Third day after operating, passed 28 F. easily into the bladder. This was followed by a chill with a temperature of 103-½°. Quinine given freely and bowels kept open; fever soon subsided. Sixth day, passed 29 F. straight, followed by another chill; temperature 102°; repeated the quinine and boric acid internally; fever soon disappeared. Ninth day passed 29 F. straight; no chill or fever. Ten days later I discharged him well. Three months later I made an examination and did not find the least recontraction. Upon inquiry he said he had dissipated a great deal since I discharged him but had experienced no bad effects and considered himself cured.

Case III.—P. P., æt. 45 years, contractor, called at my office. Gleety discharge from urethra for two years; examination showed a close stricture one inch back; operated, used cocaine solution 4%; cut with an Otis to 32 F. Had but little hæmorrhage and no fever; gave boric acid and oil of gaultheria internally. Second day passed 28 F. straight, followed by slight hæmorrhage. Fifth day passed same sound, no hæmorrhage, and patient returned to his work. Five months later I heard of his marriage.

Case IV.—B. J., æt. 22 years, carpenter. Called at his room and found him in bed suffering with retention of urine; was getting over a protracted spree of two weeks. Examination showed a close stricture anterior to the bulb of the penile urethra. After an hour's tedious work I passed a filiform. I returned the next morning and operated, cutting with an Otis to 32F.; tied a catheter in the bladder, washing with bichloride and boric acid solutions and giving boric acid and oil of gaultheria internally as in previous cases; as patient had been suffering for the past two months with malaria, I added quinine, five grains every four hours. After 38 hours I removed catheter. Third day passed 28 F. curved sound, followed by slight hæmorrhage and a chill; quinine given; fever soon subsided. Fifth day, passed same sound into the bladder; no bad effects; patient returned to his work fourteen days after operation; he is a railroad bridge carpenter and I see him often and he says he can pass as large a stream as he ever did.

Case V.—Anderson W., æt. 33 years; examination showed stricture three and a half inches back; history of long standing stricture. I operated, cutting with an Otis to 32 F. Also did meatotomy as the meatus was scarcely 31 F.; slight hæmorrhage and no fever. Second day passed 28 F. curved and discharged patient. Returned in three months recontracted; cut again with an Otis; put him on milk diet as in previous cases. Ten days later passed 29 F. straight. Have not heard of him since.

Celluloid has proved a failure as a material for artificial eyes.

WAS IT RELAPSING FEVER?

BY A. D. BARR, M D., CALAMINE, ARK.

Abstract of Paper Read before the Mississippi Valley Medical Association, Louisville, Ky., October, 1890.

The following is the description of a continued form of fever that came under my observation in the latter part of 1889.

At first I thought it was malaria, and treated it accordingly; but I soon found that antiperiodics had no influence over the disease. I then abandoned all treatment, except to modify the symptoms when they were dangerous. When the fever exceeded 103° F., an antipyretic was given, and this was always acetanilid or quinine. When the nausea and vomiting were prominent some form of opium was used. During the first intervals nux vomica, arsenic and quinine were administered to prevent a return of the paroxysms, but without success. The natural course of the disease was carefully studied, uninfluenced by treatment, and the symptoms noted at the time, and these furnish the data of this article. It was a self-limited, continued form of fever, the distinctive feature of which was three or more relapses. The recurrence of fever, as before stated, was the distinctive feature. Abruptness of invasion was characteristic of the disease. There was no prodromic or incubative stage. The seizures were never ushered in by a distinct chill, though chilly sensations were complained of, followed by a rise of temperature, usually sufficient to cause the patient to take to bed at once, though it sometimes required one, two, or even three days for the temperature to become sufficiently elevated to produce such a result.

Perspiration seldom occurred until the fever began to decline. The fever attained quickly to considerable intensity, often reaching 103° or 104° F. within twenty-four hours. In one case the fever reached 104½° F. on the evening of the first day; this was, however, a relapse, instead of the primary attack. During the paroxysms the temperature denoted a persistent intensity of fever, ranging from 100° to 105° F. There were no oscillations; the temperature either gradually or rapidly reached its maximum, and then maintained about the same elevation for from one to four days, and sometimes longer, and usually subsided gradually. The duration of the primary attack varied from six to twelve days.

During the intermission, the absence of fever and all other symptoms was complete. The period of intermission varied from two to ten days; the average was about seven. The relapse, like the primary attack, was sudden, and was also generally ushered in by chilly sensations, though the first symptom was sometimes an elevation of temperature. The fever in the relapses suddenly became more or less elevated, usually more elevated than in the primary.

Tho relapses also generally subsided gradually and with moderate perspiration.

The duration of the relapse was from four to ten days, and the greatest number of relapses was five. Of symptoms referable to the digestive system, nausea and vomiting occurred often enough to be somewhat characteristic. They were generally prominent features, but they were not always present.

They were frequently so severe that the patient was in danger of sinking from exhaustion or collapse. The vomited matter generally contained bile, and not infrequently blood. The tongue was generally coated with a white fur, but sometimes became dry and cracked. Diarrhœa was very infrequent. Constipation was the rule. There was tenderness over the epigastric and iliac regions of a very moderate degree.

The appetite was often impaired, but not to the extent that is usual in most diseases where the temperature is elevated to as high a degree as it was in this.

Sometimes there was a notable craving for food, so much so that it was highly distinctive. During the paroxysms pains in the muscles of the small of the back, and the calves of the legs were complained of. They were never entirely wanting, though they varied in intensity.

The perceptions were not blunted in this, as in various other diseases.

Delirium was present sometimes, but when it was, it was of that character that is likely to occur when there is a high febrile movement, without regard to the existing malady. The face was usually flushed. The amount of urine was usually decreased. In one instance there was complete suppression for twenty-four hours, and the kidneys acted badly for several days thereafter, which in turn was followed by an excessive diuresis. A copious flow was apt to occur about the cessation of the seizures.

Regarding the cause of the disease I am unable to arrive at any satisfactory conclusion.

In one case it seemed probable that it was contracted by contagion, as the child was in frequent contact with a young lady suffering with the same disease. The disease seemed to be developed spontaneously.

In regard to treatment, all that I could do was to modify the symptoms. The disease was essentially a self-limited one, and was uninfluenced by all treatment instituted by me. Quinine given in five to ten grain doses, from two to six hours apart, seemed to aggravate, by increasing the nausea and vomiting.

Calomel also seemed to retard convalescence. The nausea and vomiting were best controlled by morphine and listerine. In the first stage the pains were often so severe as to call for an anodyne; but as a rule to reduce the temperature below 100° F. they subsided, until the fever again became intense enough to call for repetition of the antipyretic. Good, plain, wholesome food was allowed.

GLYCERIN CLYSTERS IN INFANTILE DIARRHŒA.—Two-drachm glycerin clysters have been found of great value in infantile diarrhœa. They act promptly, and do not cause discomfort.

REPORT ON PROGRESS.

THERAPEUTICS.

BY F. NEUHOFF, M.D., ST. LOUIS.

Ichthyol, Internally and Externally.

Ichthyol, which was introduced by Unna, has taken an important place in the therapeutics of dermatology. Of late, Gadde (*Therap. Monat*) has associated the internal with the external use of the drug.

In a stubborn case of *acne rosacea*, washing with ichthyol soap effected a cure in two month's time. The internal administration of ichthyol appears to influence herpes zoster, for under it they dry up more quickly.

It also exercises a favorable influence in urticaria, purpura, and erythema nodosum.

Applied at the beginning of the disease a 50% ichthyol ointment is able to arrest the formation of a paronychia.

In alcoholics, the internal use of ichthyol diminishes the trembling, augments the appetite, and improves the sleep, after a few days.

In chronic rheumatism, the remedy is of advantage internally and externally.

In chronic nephritis, and in chronic catarrh of the stomach also, the internal administration of ichthyol is beneficial. It may be given in pill-form, capsules, or mixed with water.—*La France Med.*

Treatment of Sciatica.

G. M. Hammond (*Boston Med. and Surg. Jour.*) holds that rheumatism, gout and syphilis are not nearly so commonly associated with sciatica as is generally believed. The above named diseases probably lower the tone of the nervous system, and thus render it more liable to sciatica. Yet the majority of persons with sciatica, according to Hammond's experience, have never suffered from rheumatism, gout or syphilis.

Moreover, whatever the cause of sciatica, it should in all cases be treated as a neuritis, for such it is.

Two indications are to be fulfilled, namely the relief of the pain, and the treatment of the inflammation.

Pain, when severe enough, requires morphine. This is best injected hypodermically as near as possible to the nerve, as there is some reason to believe that morphine has a tendency to reduce inflammation of the nerve when brought into contact with it. Cases not severe enough for morphine may be treated by a 15 grain dose of phenacetin, which can be repeated in an hour if necessary. Antipyrine and antifebrin can be used in place of phenacetin if desired.

The treatment of the inflammation of the nerve depends almost entirely on rest, application of cold, and the use of electricity.

Rest should be secured by keeping the patient in bed and applying a long splint reaching from the axilla to the sole of the foot. Every fourth day, the splint should be removed for a short time, in order to render possible slight passive manipulation of the joints and muscles.

Cold is best applied to the sciatic region by ice bags.

Electricity is very useful, but only the continuous current should be employed. The negative electrode (9 by 4 inches in size) is strapped to the sole of the foot by elastic bands. The positive electrode (5 inches square) is applied over the point where the sciatic nerve emerges from the pelvis. If there are any very tender points along the course of the nerve, this electrode can be changed occasionally so as to cover them. The strength of the current should not be such as to cause much pain, but should fall just short of doing so. The continuous current should be applied (without any interruptions) for 5 minutes, once or if possible twice a day.

Sulphonal in Diabetes.

Casarelli finds sulphonal to be by far superior to antipyrin in the treatment of diabetes mellitus.

It produces diminution of both the quantity of the urine and of the sugar. When the medicine is given in doses of 1 to 2 grammes in 24 hours, it has but a slight effect. With a dose of 3 grammes (45 grains) given in 24 hours, the best results are obtained. If this latter dose is continued for a while, it is soon followed by great somnolence, which disappears again when the dose is decreased.—*Le Bulletin Med.*

Resorcin in Diphtheria.

In the *St. Petersburg Med. Woch.*, Dr. Andeers writes an exhaustive article on the resorcin treatment of diphtheria, as first promulgated by him in 1877. Since then he has employed it in over 222 cases and with only good results. Although most writers seem unable to agree with Andeers as to the value of resorcin in diphtheria, Callias, Dujardin-Beaumetz and Cattani testify in its favor.

Last year, Leblond and Bandier published a work on resorcin, to which Andeers refers at some length. The authors speak of resorcin as an antiseptic of the first order, which is not employed as extensively as it should be.

It is very soluble and easily vaporized. As it is rapidly absorbed and rapidly again excreted, it is non-poisonous, even when used in relatively large amounts for long periods of time. While it does not attack healthy tissues, it permeates diphtheritic membranes and neutralizes the poison which they contain. Under its use, the swelling of the lymphatic glands quickly subsides.

Leblond and Bandier have now employed it in diphtheria, during the past 8 years, and they have not reported a single bad result, though many cases of severe

type were treated. They used a 10% solution of resorcin in glycerin. With this the affected parts were touched, every hour in daytime and every 2 hours at night. At the same time, the air in the room was constantly sprayed with a 5% aqueous solution. This spray is moreover supposed to prevent the danger of contagion.

When the nose is affected, it may be syringed out with a 1% resorcin solution, or else a 5% solution may be dropped into it.

When the larynx is already affected, resorcin is no longer so efficacious. Nevertheless the resorcin spray still gives good results in these cases, as long as asphxia it is not yet imminent.

If the resorcin treatment is employed from the beginning of the disease, the amount of false membrane remains very small and the larynx never becomes diseased.

Subcutaneous Injections of Silver in Tabes.

Dr. Rosenbaum, of Berlin, has of late used subcutaneous injections of silver in cases of tabes dorsalis. The following formula was employed to prepare the solution.

℞	Argent. chlorat rec. pr. et. bene loti	0.05
	Natr. subsulfurosi - - -	0.3
	Aq. dest. - - - - - -	10.0

M.—filtr. subtilissime in vitr. nigr.

To a tabetic, æt. 45 years, at first a half syringeful of the above solution was administered hypodermically. This dose was afterwards gradually increased to a syringeful. The patient bore this very well, and showed marked improvement both as to subjective and objective signs. His walk was no longer ataxic; Romberg's sign disappeared; bladder and rectal symptoms began to ameliorate. The improvement lasted for quite a while.

Eleven other patients were treated by the same method. Among this number, one in particular showed great improvement.

The severe pain which nearly always followed the injections, and usually lasted from 12 to 24 hours, necessitated discontinuance of the treatment in several cases. Patients with marked analgesia of recent origin would therefore seem pecularly well adapted to undergo this treatment, which should not be attempted in sensitive persons or in women.—*Therap. Monat. Med. Chir. Rund.*

A Formula for Insect Bites.—One of the very best applications for the bites of mosquitoes and fleas, also for other eruptions attended with intense itchings, is: Menthol in alcohol, one part to ten. This is very cooling and immediately effectual. It is also an excellent lotion for application to the forehead and temples in headache, often at once subduing the same.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., Editor. W. C. MARDORF, M.D., Associate Editor.

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SATURDAY, NOVEMBER 8, 1890.

The Treatment of Anæmia.

Prof. Laache, in a paper read before the late International Congress at Berlin (*Med. Chir. Rundschau*), says that the first thing to be attended to is proper hygienic surroundings and diet. As regards the latter, it is subject to great modifications according to the condition of the patient and the ability to digest. One general principle applies to all cases: there should be an attractive variety of food, and the diet should be frequently modified. Laache believes it to be very doubtful whether overfeeding and the various artificial foods, peptones, etc., accomplish any lasting benefit. So far as iron is concerned, it is indicated in but one form of anæmia, namely the real primary chlorosis; here the drug has an almost specific action, such as quinine has in malaria. Of its manner of action we are in almost total ignorance. The latest hypothesis, according to which iron is but a simple intestinal hæmostatic, has no evidence to corroborate it. The author believes that the old-fashioned Blaud's pills, given in large doses, is still by far the best of the various iron preparations; if these are not well borne by the patient, the ordinary albuminate of iron should be given a trial. Unfortunately, relapses easily occur when treatment is left off, nevertheless treatment should not be extended over too long a period of time, for the prolonged use of ferruginous preparations usually does more harm than good. Moreover it is exceedingly doubtful whether we can accomplish permanent benefit by the long continued use of iron, for it is only too probable that chlorosis is in the majority of cases to be regarded as a result of the hypoplasia of the larger vessels, described by Virchow.

In progressive pernicious anæmia, arsenic gives especially good results. This drug is commended on all

sides, yet we must not lose sight of the fact that even with this drug relapses frequently occur. Indeed we should not place too much faith in the recorded cases of recovery by the use of this drug, for a number of instances are known where chlorotics have fully recovered spontaneously, so that the cases of cure by the use of arsenic by no means prove that it was in consequence of the use of the drug, since here too, recovery may have been spontaneous. As regards oxygen inhalations in anæmia, opinions are very much divided concerning its usefulness. Transfusion deserves especial consideration in cases of pernicious and post-hæmorrhagic anæmia. Finally, Laache notes as one of the curiosties of medicine the treatment of chlorosis recommended by Fey of Christiana; this consists in drawing small amounts of blood from the patient at short intervals.

Rules for the Selection of a Wet Nurse.

Dr. Rudolph, Temesvary (*Gyogyaszat - Med. Chir. Rundschau*) writes briefly yet comprehensively on this important subject. He first enumerates the diseases, any one of which is sufficient to render a woman ineligible for the office of wet nurse: 1. Pulmonary phthisis; where the parents or other near relatives of the subject have had it, the latter is to be examined with especial care. 2. Scrofula, caries of bone, and lupus, even where the patient has been well for some time after recovery. 3. Venereal diseases, especially gonorrhœa (that the child may be secure from all danger of specific eye disease or vulvo-vaginitis), and syphilis in all its stages; even if no signs of the latter be found on the mother, pathological changes in her offspring should be given due importance, and a history of several abortions or premature labors should always arouse suspicion of present or past trouble. 4. Chronic anæmia, especially when brought on by serious organic disease; acute anæmia is only a temporary contraindication; leucæmia. 5. Other severe disturbances of nutrition, as scurvy, diabetes. 6. Hysteria, epilepsy, mania, and progressive paralysis, whether existing at the time or noted in the personal history; the business of nursing is forbidden in such cases, not because we fear any transmission through the milk, but rather because a woman suffering from such serious mental and nervous diseases might not devote sufficient care and attention to the infant entrusted to her charge, and might even subject it to violence during an attack; besides, to continue nursing might be productive of harm to the woman herself. 7. Chronic skin diseases. 8. Acute infectious diseases. 9. Serious organic diseases which demand much rest in bed, or are accompanied by debility. 10. Intestinal catarrh; experience has shown that the nursing infant is apt to suffer from dyspepsia and intestinal catarrh. 11. Inflammation of the peritoneum, uterus, or adnexa. 12. Agalachia and galactorrhœa; by the latter is meant that pathological excess of milk which strongly contraindicates nursing because the condition is thereby rendered worse and worse until the general health is seriously affected, the so-called tabes lactea. 13. Milk deficient in quantity or quality. 14. Retracted nipples; relaxed, pendulous mammæ. 15. Mastitis and fissured nipples (until recovery). 16. Menstruation and pregnancy; the former should constitute a bar to accepting a nurse if it has appeared at the time; it should not be considered a sufficient reason for dismissing the nurse if it come on after she has been engaged; at any rate, if the child does not do well or has diarrhœa during the height of the flow (one to three days) it may be fed with sterilized cow's milk, otherwise nothing need be done. 17. Abnormal growths of any kind and wherever situated. 18. Various eye, ear, and nose troubles, such as blepharadenitis, the various kinds of otitis, and ozæna; when lactation brings on conjunctivitis, as it may, or aggravates a previously existing one, the nurse is to be immediately dismissed. 19. Finally, all diseases which do not hinder the woman so much from nursing, but impair her general usefulness, for example, excessively varicose veins, and various surgical diseases. Where the women are free from the above diseases, the following should insure preference: 1. Where the child of the subject has been born four to six weeks previously. 2. Where the difference between the age of her own child and that of the foster child is not more than two or three months; her own child should always be the older of the two, never the younger, even if many physicians do not pay much attention to this point. 3. Multipara, namely II-para and III-para, inasmuch as these understand how to care for infants, and in whom the various disorders of lactation occur more seldom. 4. Those between twenty and thirty years of age, the younger to be preferred to the older. 5. Those whose milk gives the best results on examination; lastly, a tender disposition, a quiet temperament, a healthy appearance, personal cleanliness and propriety are excellent attributes.

Urethritis and Endometritis.

Dr. Vedeler, in *Norsk Magazin f. Laegevidenskaben* (*Deutsch. Med. Zeit.*), endeavors to throw more light on the following points:

1. The frequency of simultaneous inflammation of the urethra and of the endometrium in acute gonorrhœa.

2. The frequency with which specific inflammation of the endometrium extends to the adnexa uteri.

From 148 cases observed by him, of gonorrhœal urethritis in women, he has selected 50 cases in which the urethritis was an acute one, and in which careful examinations were made by means of the speculum and microscope. He obtained the following results:

1. Among the 50 cases of urethritis, he found 36 cases of co-existing specific endometritis; according to this, when endometritis and gonorrhœal urethritis come on at the same time, the endometritis will be gonorrhœal in 72% of the cases. In general we may conclude that

the endometritis is specific when vaginitis is present at the same time. If vaginitis is not present, we should regard the endometritis as being gonorrhœal in charac ter when pus is mixed with the discharges.

2. Among the 50 cases of urethritis, specific endometritis was present and followed by other complications in 16. Therefore, specific endometritis extended to the uterine appendages in 32% of the cases. It seemed as if further extension of the specific inflammation and involvement of the appendages was to be feared only when vaginitis was present at the same time.

To avoid complications, we should exert ourselves to put down the endometritis as soon as possible. The author does not believe that he can clear himself of the charge that in one or two of the cases the local treatment adopted was responsible for the setting-up of complications; whether the means employed were too severe, or whether the manner of application brought about too much irritation, he is unable to state. For this reason he recommends, in cases where vaginitis is not present, the internal administration of copaiba, and vaginal douches of lukewarm water morning and evening. If the endometritis does not subside after several weeks, the cervical canal is carefully mopped twice a week with a dilute solution of glycerine and acetate of lead. Even if recovery is not very rapid by this method, its use is not followed by dangerous complications, which is more than can be said of certain other methods of treatment. If vaginitis is also present and the introduction of the speculum is accompanied by much pain, the above treatment is employed, and after each douche a vaginal suppository composed of tannin, carbolic acid in small amount, and cocoa butter, is introduced. In addition the patient must have absolute rest. The local treatment of the endometritis comes up for consideration after the vaginitis has subsided, or at any rate, after it has passed the acute stage.

The Uses of Codeine.

The rush of new analgesics and hypnotics has almost completely overshadowed the long-known drug, codeine, and in this country, at least, its merits have been overlooked, and but little employment has been found for it. Dr. M. Loewenmeyer, in *Deutsch. Med. Wochenschr.*, gives a summary of the various conditions in which he has found it useful. The dose which he has used is from $\frac{1}{3}$ to $\frac{2}{3}$ of a grain; where the latter dose did not prove effectual, larger doses also generally failed. It was generally given in powder form, also in mixtures; latterly also in the form of suppositories. The results were favorable and highly satisfactory in the majority of cases of the following diseases: Painful conditions of the abdominal and pelvic organs (gastralgias, colics, visceral neuralgias), ulcer and carcinoma of the stomach, carcinomata of the liver, of the intestine, and of the peritoneum, and pain arising from disease in the genito-urinary system, for example, in ovarian pains (this latter differs from the observations made by Freund). Codeine rendered excellent service in diseases of the thoracic organs: phthisis, bronchial catarrhs, pleurisies, pneumonias, and cases of asthma. It also seemed to act favorably in diseases of the heart, as in conditions of stenosis. Loewenmeyer highly prizes the hypnotic powers of codeine, and there is no doubt that this property of the drug is very much underestimated. The hypnotic results were not so satisfactory in the different varieties of mental and nervous diseases.

MEDICAL ITEMS.

Dr. Louis Adelsberger, who has lately returned from a prolonged sojourn at New York and London, is engaged in practice at Waterloo, Ill., his former home.

Chattanooga.—A new hospital is being planned for Chattanooga. A company has been formed of sufficient strength to assure its erection and equipment with all the modern appliances for the comfort of patients and quick and easy manipulation of the surgeons. In connection with the hospital will be a medical college.

Murder of an Asylum Physician.—Dr. George W. Lloyd, assistant superintendent of the Kings' County Asylum at Flatbush, N. Y., has been murdered by a discharged lunatic, who was at the time in pursuit of the superintendent, Dr. Fleming. The assassin was James M. Doherty, whose insane passion for Mary Anderson gave him such newspaper notoriety some time ago.

Amylene Hydrate in Epilepsy.—Nache agrees with Wildermuth as to the value of amylene hydrate in epilepsy, even where bromides have failed, and where the attacks are not only very frequent but severe. He uses a 10% solution of the drug, and gives from 1 to 2 tablespoonfuls a day (from 30 to 90 grains). Nache also believes that *petit mal* and nocturnal epilepsy are benefited by the drug.—*Jour. A. M. A.*

Ethereal Preparations as Topical Remedies.—Sir James Sawyer, of the Queen's Hospital, Birmingham, writes in the *Lancet* in high commendation of ethereal tinctures as topical applications, chiefly on account of the osmotic capacity of ether and its solvent action on the fatty constituents of the sebaceous secretion of the skin, whereby the most intimate application of remedies to the epidermis is facilitated. He has made special use of ethereal preparations of bellodonna, iodine, menthol, and capsicum.

A Fasting Heroine Who Succumbed.—Zelie Bourrion, the fasting girl of Bourdeilles, in the department of the Dordogne, who endeavored to emulate the feats of Tanner, Succi, and Jacques, has just died at her home. Her constitution was completely shattered after her fast of 33 days. When she returned to her cottage,

she tried to eat a little, but her stomach was unable to bear the food, and she succumbed in a few days. Her fate will serve as a warning to any persons of her sex and class who may have been tempted by the notoriety which she obtained by her fast to follow in her footsteps.—*Hospital Gazette.*

THE LOOFAH BANDAGE-MATERIAL.—A writer in the *Chemist and Druggist* says that possibly the most important application of the "loofah," or towel-gourd of Egypt, will be in the manufacture of surgical bandage-stuffs. Bandages made of this material are already offered for use. In Germany soles for slippers are made from the loofah, and it is claimed that these soles are extremely elastic and are washable; they are constantly dry, and will keep the feet cool in summer and warm in winter. The loofah also makes an admirable under-cloth for the saddle, as it rapidly absorbs moisture.

COLOR OF BEEF EXTRACT.—"It is not generally known that pure beef extract is of a dingy, unpleasant gray color, and that from its repulsive look, especially when dissolved or made into beef tea, it would, unless doctored up as is now done, have very little if any sale or use. Science and art come in nicely to remedy this defect by furnishing a harmless dye—namely, burnt sugar or caramel. This also improves the flavor as well as the appearance. We see no harm in this apparently nice little innocent deception—especially if druggists and physicians are fully acquainted with it, as they soon will be."—*Drug. Circ. and Chem. Gaz.*

FIDGETS.—The *Med. Rec.* has received the following interesting and valuable communication: "If you know of any one who has got the fidgets right bad, tell them to suspend a flat-iron, or anything else the looks of which will not cause the fidget, from the ceiling of the room to near the floor, or the distance which causes the most agreeable sensation, set the weight to swinging a little, and sit down by it with the eye fixed on it. If your patient is one of the sympathetic kind it will be likely to make her quiet. "If the weight is suspended from two hooks a little apart, it will have a better effect.—M. B."

THE MUIRHEAD COLLEGE FOR WOMAN.—The late Dr. Muirhead, of Scotland, has directed, subject to certain life-rent provisions and other legacies, his trustees to apply the whole residue of his estate to found and maintain an institution, to be called the Muirhead College, for the instruction of women in physical and biological sciences, where women may receive an education to fit them to become medical practitioners, dentists, electricians, chemists, etc. The trustees have already had several meetings, and it is expected that in the course of a few months they will be in a position to announce the arrangement they have been able to make. The trustees believe that £30,000 may be fairly taken as an approximate estimate.

DEATHS IN THE PROFESSION ABROAD.—Professor Wenzel Gruber died of apoplexy at Vienna, æt. 76 years. He was an Austrian by birth, but had been Professor of Anatomy at St. Petersburg for nearly 40 years, during which time he published some 500 papers, chiefly on anatomical subjects. Some years ago he was named an Imperial Councillor of State by the Czar. Among other eminent foreign members of the profession who have recently joined the great majority are Dr. G. C. H. Lehmann, Professor of Ophthalmology in the University of Copenhagen, who died at the age of 75; and Dr. Ernst Hardy, head of the chemical laboratory of the Paris Academy of Medicine, well known for his researches in physiological and pathological chemistry. He was 63 years of age.

COMPARATIVE MORTALITY IN HOSPITAL AND PRIVATE PRACTICE.—Lagueau finds that the fatality from various diseases is greater in the Paris hospitals than in private practice. He gives the following percentages:

	Private Practice.	Hospital.
Typhoid,	12	19
Variola,	12	17
Measles,	5	23
Scarlatina,	6	9
Whooping cough,	6	23
Diphtheria,	30	64

The causes for this discrepancy, which will probably be found to exist in all large cities, are to be looked for in the still wide-spread prejudice against hospitals. People do not go to the hospital if it can be avoided, and consequently many cases reach such institutions in an advanced stage of disease. Numerous other reasons also suggest themselves.

DIPHTHERITIC INFECTION FROM A CAT.—The daily press reports the following interesting but sad case from Wisconsin: The family of Robert Paul, at Middleton, has been afflicted by diphtheria, which was brought into the house in a singular manner. About four weeks ago a stray cat came to their home and one of the children handled and played with it. Although it was noticed at the time that it discharged at the nose and mouth, nothing was thought of it until soon after, when the little boy became ill with black diphtheria of the most malignant kind, which the doctor said he caught from the cat. The boy died. Then a second son took the disease and died. The father, mother and daughter were also stricken down, but recovered. Allen, the only remaining son and support of his parents, cared for them all through their terrible sickness, holding one of the boys when dying and preparing them for their last resting place with his own hands. When the others were recovering he was taken down and died.

YOU CAN easily add to your popularity and usefulness by following the instructions given by the McArthur Hypophosphite Co., on title Page of this issue.

CORRESPONDENCE.

WASHINGTON, D. C., OCTOBER 27, 1890.

EDITOR WEEKLY MEDICAL REVIEW.—I am requested by the Honorable Secretaries of the Committee of Organization of the Seventh International Congress of Hygiene and Demography to call attention to the fact that this Congress will be held in London during the week beginning August 10, 1891.

The governments of all countries and municipalities, and all public health authorities, universities, colleges and societies occupied in the study of the sciences more or less immediately connected with hygiene, are invited to cooperate and appoint delegates to represent them at the Congress. The Prince of Wales will preside.

A Committee of Organization has been formed, of which Sir Douglas Galton is chairman, and Prof. W. H. Corfield and Mr. Shirley F. Murphy are honorary secretaries. An exhibition of articles of hygienic interest will be held in connection with the Congress. The last of these Congresses was held in Vienna in 1887, and was attended by over 2,000 persons, and it is expected that the London meeting will be one of great magnitude and importance.

Very respectfully,

JOHN S. BILLINGS, M.D.,

Member of the International Permanent Committee.

BOOKS AND PAMPHLETS RECEIVED.

Saunder's Question Compends, Double Number. Essentials of Practice of Medicine, prepared especially for Students of Medicine, by Henry Morris, M.D., late Demonstrator Jefferson Medical College, Philadelphia; Visiting Physician to St. Joseph's Hospital, etc.; with a very complete appendix on the Examination of Urine, by Lawrence Wolff, M.D., Demonstrator of Chemistry, Jefferson Medical College, Philadelphia: W. B. Saunders, 1890.

No. 6 and 7 of Physicians' and Students' Ready Reference Series.

Ointments and Oleates, especially in Diseases of the Skin, by John V. Shoemaker, A.M., M.D., Professor of Materia Medica, Pharmacology, and Therapeutics, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia, etc.
Second Edition Revised and Enlarged.

Epilepsy: Its Pathology and Treatment. Being an Essay to which was awarded a prize of 4000 francs by the Academie Royale de Medecine de Belgique, December 31, 1889. By Hobart Amory Hare, M.D., B.Sc., Clinical Professor of the Diseases of Children, and Demonstrator of Therapeutics in the University of Pennsylvania, etc. Philadelphia and London: F. A. Davis, Publisher, 1890.

Diagnosis and Operative Treatment of Gunshot Wounds of the Stomach and Intestines. By N. Senn, M.D., Ph. D., Milwaukee, Wis.

Transactions of Texas State Medical Association, Twenty-Second Annual Session held at Fort Worth, Texas, April 22–25, 1890.

Essentials of Gynæcology, Arranged in the Form of Questions and Answers, Prepared especially for Students of Medicine. By Edward B. Cragin, M.D. Illustrated. Philadelphia: W. B. Saunders, 913 Walnut St.

I. The Prevention of the Short Leg of Hip Disease. II. The After-Treatment of Hip Disease. By A. B. Judson, M.D., New York.

A Criticism of Willett's Operation of Talipes Calcaneus. By the Same.

The Pendent Limb in the Treatment of Joint Diseases of the Lower Extremity. By the Same.

Vaginal Tamponage: An Improved and Simplified Process for Rendering Continuous Support to Organs Composing the Female Generative Tract. By Chas. C. Fredigke, M.D. Illustrated.

Saunders' Pocket Medical Lexicon. Being a Dictionary of Words and Terms used in Medicine and Surgery. By Jno. M. Keating, M.D., Philadelphia: W. B. Saunders, 913 Walnut St. 1890.

Pulmony Consumption Among Firemen. By Thos. J. Mays, M.D., Philadelphia.

Civil Service Reform Association of Missouri. Duty of the Christian Citizen. Notes from the Thanksgiving Day Services in St. Louis, November 28, 1889. Rev. S. J. Niccolls, D.D., Rev. M. Rhodes, Rev. J. C. Learned, Bishop Tuttle. St. Louis, 1890.

An Explanation of the Phenomena of Immunity and Contagion, based upon the Action of Physical and Biological Laws. By J. W. McLaughlin, M.D., Austin, Tex.

Arsenite of Copper, the Results of Collective Investigation. By John Aulde, M.D., Philadelphia.

Clinical Reports of Arsenite of Copper. By the Same. Med. News.

The Uses of Rhus Toxicodendron. By the same. Med. and Surg. Reporter.

Transactions of the American Dermatological Association at its Thirteenth Annual Meeting, held at Boston, Mass., Sept. 17–19, 1889. Geo. H. Tilden, M.D., Secretary.

A Case of Brain Tumor (Angioma Cavernosum), Causing Spastic Paralysis and Attacks of Tonic Spasms. Operation. By L. Bremer, M.D., and N. B. Carson, M.D., of St. Louis.

A Protest Against the Supreme Court of Illinois, and also Against its Legal and Moral Doctrine as Expressed and Illustrated in Connection with the Case of Edward C. Hegeler *vs.* The First National Bank of Peru. By the Plaintiff in the Case.

The Treatment of Eczema in Elderly People. By L. Duncan Bulkley, A.M., M.D., New York.

Report of Proceedings of the Illinois Army and Navy Medical Association; Meeting held at Springfield, Ill., June 26, 1890.

Identite de la Dengue et de la Grippe—Influenza. Par le Dr. Jules Rouvier, Paris: Libroire Medicale, 23 rue Racine. Prix one franc.

Scheme of the Antiseptic Method of Wound Treatment. By Dr. Albert Hoffa, Privat Docent of Surgery in the University of Wuerzburg. Translated by Aug. Schachner, M.D., Ph. G. Louisville, Ky. Price 50 cents.

The Treatment of the Morphine Disease. By J. B. Mattison, M.D., Brooklyn, N. Y. Reprinted from Therapeutic Gazette.

A Text-Book of Comparative Physiology for Students and Practitioners of Comparative (Veterinary) Medicine. By Wesley Mills, A.M., M.D., D.V.S., Professor of Physiology in the Faculty of Human Medicine and the Faculty of Comparative Medicine and Veterinary Science of McGill University, Montreal, etc. New York: D. Appleton & Co., 1890.

Some Problems of Bacteriology. Theodore Patten, A.M., M.D., Lecturer and Demonstrator in Bacteriology, Medical College of Indiana, Indianapolis.

Synopsis of a Course in Microscopy for Pharmacists. By H. M. Whelpley, M.D., F.R.M.S., St. Louis. Read before the American Pharmaceutical Association, at Old Point Comfort, 1890.

Woods Medical and Surgical Monographs, Vol. 7, No. 3, September, 1890. Containing:

I. Insomnia and Its Therapeutics. By A. W. MacFarlane, M.D.

II. Index for Vol. VII.

Wm. Wood & Co., 56 Lafayette Place, New York.

The Relation of Eye-Strain to General Medicine. By George M. Gould, M.D., Ophthalmic Surgeon to the Philadelphia Hospital. Reprint from Medical News.

The Hodgen Suspension Splint. By H. H. Mudd, M.D., St. Louis.

Fistula in Ano in the Female, Operated on by Suturing. By Hubbard W. Mitchell, M.D., New York. Read before the Academy of Medicine.

Local Treatment of Diphtheria. By J. C. Mulhall, M.D., St. Louis.

Cure of the Falsetto Voice. By the same.

Hip-Joint Disease, with Cases. By Stewart Le Roiz McCurdy, M.D., Dennison, Ohio, Surgeon to the P. C. and St. Louis Railway, etc.

The Mechanical Treatment of Synovitis. By the Same. Reprinted from Pittsburgh Med. Review.

Some Points in the Treatment of Gonorrhœa. By Gardner W. Allen, M.D., Surgeon in the Genito Urinary Department, Boston Dispensary. Reprinted from Boston Med. and Surg. Jour.

The Treatment of Compound Fracture. By S. L. McCurdy, M.D., Dennison, Ohio.

Hypodermic Medication in Diseases of the Eye. By Charles J. Lundy, A.M., M.D. Detroit. 1890.

Description of a Series of Tests for the Detection and Determination of Sub-Normal Color-Perception (Color-Blindness). Designed for use in Railway Service. By Charles A. Oliver, M.D., of Philadelphia.

Supra-Pubic Drainage of the Bladder. By Wm. B. Van Lennep, A.M., M.D., Philadelphia, Pa. Reprinted from Hahnemannian Monthly.

An Illustrated Pamphlet on Portland, Oregon.

Announcement and Catalogue of the National Medical College, Medical Department of the Columbian University, Washington, D.C., for the 69th Session, 1890–91.

Traitement des Fractures de la Rotule par l'Ouverture Immediate et Large du Genou et la Suture Metallique des Fragments. Cas de Fracture Ancienne, Reconstitution du Tendon Ratulien. Seiz cas d'Ouverture de Genou. Par Dr. Just Lucas-Championniere, Chirurgien de l'Hopital St. Louis, Paris. A. Coccoz, 14 rue de l'Ancienne Comedie.

SOCIETY PROCEEDINGS.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated meeting, September 10, 1890, the vice-president, John B. Roberts, M.D., in the chair.

Dr. Benjamin T. Shimwell read a paper on

A New Method of Delivering the Fœtal Head.

Nature's manner of delivering the fœtal head has been followed by obstetricians from time immemorial, recognizing the fact that the occiput is borne under the symphysis pubis in normal labor. The face and chin stretch the perineal body, then force their way out, requiring an especial amount of care to prevent tearing of this tissue. The extent of injury to the pelvic floor is not properly appreciated; if the superficial tissue of the perineum is safe the attendant congratulates himself on his possible skill; or if aware of deeper injury, feels grateful that no apparent injury is shown to the watchful eyes of the nurse or patient's friends.

Thus do thousands get out of the confinement-bed ruined in health, carrying into the future injuries that must of necessity bring ill results. Various plans have been suggested to support and accommodate the perineal body to the oncoming head.

It is strange how often the anatomical construction of the perineum is overlooked, and considered merely as a space-filler. It is by this that so much injury is done. The gynæcologist's specialty lives by these results.

These are the reasons, hastened probably by experience gained in the above manner, that have induced me

to write this paper. The theory that will be advanced, backed by my application of it in a great number of cases, is evidently new; if not, it has not come to my knowledge by reading or otherwise. The advantage of this method is the saving of the pelvic floor from injury either superficial or deep. No attempt is made to show expedition, but a modification of the ordinary method of labor changing the direction of the impinging force.

Naegel says that 70 out of every 100 vertex presentations are in the first position, the other 30 are occiput to right and posterior. The remaining positions are exceedingly rare.

When the head presents in the first position the body of the child must not be overlooked. The back of the child must present to the front and left, the chest to the back and right angles with the vertex presentation of the head at the superior strait. The important point in this theory is the rotation of the head to the symphysis pubis. The manner of rotation of the head is mooted. Pajot claims that the shoulders participate in the rotation, but contradicts himself when he further says: "That it is above all the shape of the child's head which decides the character of the movement;" also, "That the occiput will, therefore, be carried forward less on account of the direction of the forces which impel it, than because of the necessity for accommodation of the cephalic surfaces to the pelvic surfaces." All writers admit that after expulsion of the head occurs restitution takes places, that in a case of first position, after the head is delivered, the head turns with its occiput to the left thigh—that is, in the direction that the head presents at the superior strait; this is an untwisting of the neck.

Gerdy claims that this is "an external expression of a movement of the shoulders within the pelvis, by which the biacromial diameter passes from the transverse to the antero-posterior diameter, the head following the internal rotation." The folly of this assertion is on its surface. The head is free and the neck and body are constricted by the vagina and uterus, and if rotation does take place, can we overlook the anatomical relation and action of the atlas vertebræ? Would not the weight of the head allow of the rotation internal without its external manifestation?

Penrose (Hirst, vol. i., p. 571) says: "While the head has rotated, the body of the child, still in the cavity of the uterus, has been tightly grasped by the firmly contracting walls of the uterus, and has not participated in the movements of the head; hence the shoulders are still oblique at the superior strait, consequently the neck of the child is twisted." Tne latter theory, according to my experience, is the true one. The fact of the anatomical construction of the cervical vertebræ of the child cannot be overlooked. This arrangement allows of a rotation of one-fourth of its circumference to take place without injury to the spinal cord. Therefore, if Pajot's theory of the accommodation of the cephalic surfaces to the pelvic surfaces, rather than the application of the force, is true, then it can be seen that rotation of the head is possible without the shoulders. Then, again, the head is not free to wobble around the pelvis when it has reached such a condition of flexion, neither is the neck a rigid body depending on the shoulders for its position. If the theory of shoulder rotation is so, then nature's method is superfluous; for why should the biacromial diameter be changed from its oblique position, which is nearer the antero-posterior diameter, to the transverse, then rotate back again beyond its former position to the antero-posterior.

Playfair believes in partial rotation.

Believing, then, that the shoulders still maintain their oblique position through all the stages of the delivery of the head, what occurs when rotation brings the occiput directly antero-posterior? This has been accomplished by the rotation mentioned of the atlas on the axis vertebræ to one-fourth of its circumference; this having occurred, the delivery of the head takes place, then immediately external rotation or restitution occurs, that is, the neck untwists.

The outlet of the female pelvis is four inches antero-posterior and transverse. The antero-posterior is possibly increased a half inch by extension of the coccyx. These measurements are decreased by the soft tissues; this is more marked in the antero-posterior by the rectum and perineal body. As the head in the last act of delivery begins to extend, we have presenting the cervico-frontal diameter, which is four inches; this has to pass through a space that is but four inches, possibly four and a half inches, lessened by the perineal body, which is at this stage excessively stretched and attenuated. As the safety of the perineum is an exceedingly important matter, it occurred to me that this might be accomplished by lessening the size of the impinging body and transferring the extending head into another direction. It is the nose and chin that rupture the pelvic floor, therefore if the direction of this force can be changed to some other point than the junction of the levator and muscle, it can be easily seen how injury to this muscle can be prevented.

When the labor has reached this stage, I place the woman across the bed on her back,knees well drawn up, then compel her to breathe with the mouth wide open to prevent bearing down. As the head presents in the oblique direction and to reach the antero-posterior diameter it rotates, twisting the neck, the first step in the method is to re-establish the direction of the first impingement; this is not done until the cervico-frontal diameter is reached; this must be complete, then forcing the head into extreme flexion by grasping the presenting occiput by the hand (in non-instrumental labors), I begin my rotation; the first step is to untwist the neck; this accomplished, the head presents cervico-frontal to the left anterior. I then take advantage of the same anatomical construction of the cervical vertebræ that allows of the normal rotation, and rotate one-fourth in the opposite direction, that is, to the left. The cervico-frontal is then transverse, the neck lying

on the labia of the left side, the forehead beginning to engage the soft tissues of the right labia. What is now presenting to the antero posterior diameter, or, what is more important, to the perineum? The biparietal diameter, which measures three and one-half inches, therefore less tension on the perineum. The possibility of delivering the head in the transverse diameter has been questioned. The articulation of the head to the spinal column is wisely arranged; if no other object than birth was intended, it has well served its purpose. The diameters of the extending face are those of a right-angle triangle, the hypothenuse of which is four inches, the perpendicular three inches, the base two and four - fifths inches. The mechanical advantage of this is apparent. If the measurements had been those of a triangle, the impossibility of delivery is easily seen, the head conld not be born as long as the perineum existed. The sweep of the extending head would be the same at the chin as at the forehead, and the perineum would be torn in every case and in every succeeding labor; but the measurements are those of a right-angle triangle, and of a necessity the chin must recede when complete extension takes place, so when extension is made in the transverse diameter of the inferior strait the chin does not impinge on the ramus of the ischium.

Having got the head into this position, I begin the last stage of the delivery of the head. The head has been all this time in extreme flexion, then extension is performed, the soft tissues of the labia push aside, and nose follows on forehead, chin on nose; delivery is complete, and the pelvic floor is safe. The head then untwists to its normal position.

DISCUSSION.

DR. E. E. MONTGOMERY:—I think that the members of the Society are greatly indebted to Dr. Shimwell for the graphic presentation of this method of dealing with the delivery of the head and effort to save the perineum. This certainly is a violation of that old principle which has been handed down the ages, that "meddlesome midwifery is bad." When we consider that all progress in obstetrics and every step in advancement has been in violation of this principle, this thought may not be considered an objection to this procedure, which certainly seems to be one which should be serviceable. But, not having had experience myself, I an unable to say more than these few words in commendation of it.

DR. J. M. BALDY:—It seems to me that the remarks of Dr. Montgomery, in regard to meddlesome midwifery are true as regards pathological processes, but not as regards physiological processes. Certain it is that in almost everything in which we have attempted to interfere with physiological processes, we have found that they have been carried on a great deal better by Nature herself than by any so-called improvement that we have made on her. If Nature had meant that the head should be delivered in the transverse diameter of the outlet, she would have given us some indication of such desire. On the contrary, she has shown us very clearly and distinctly that the head was to be delivered in the antero-posterior diameter. It is probable that the head can be delivered in the transverse diameter, as Dr. Shimwell has pointed out, if all the measurements are of average size; but all of us know perfectly well that it is the exceptional head that we come across, and not the typical head. Many of the heads are large, and the higher we get in the stage of civilization the larger the head. The normal head may go through, but I doubt not that Dr. Shimwell will run across many cases that he will not be able to deliver in the transverse diameter. Unless the head will pass easily, we have here no room for extension of the outlet. It is a fixed quantity bound by bony walls—the ramus of the ischium on both sides—and there can be no distension. On the contrary, in the natural methods of dilivery we have free room for extension taking place though the perineal body and the soft part of the lower part of the pelvis. Now, it may be that there is danger to the levator ani muscles from over-distention, but at the same time I conceive, and it has been my experience, that the danger to these muscles is greater in proportion to the amount of interference we give to the perineum. In other words, we have here a hard body starting from a given point and progressing at a certain angle to a certain point at which it meets a plane of resistance, that plane of resistance being the soft parts of the pelvic floor, and, if you will, principally the levator ani muscles. There is a well-known physical law, that any body moving in a given direction and meeting with an obstacle, will be deflected at a certain angle. We have this occurring in delivery of the head. The head comes down and meets a resistance, which, although not a fixed resistance, is sufficient to cause deflection in the line of least resistance. This line of least resistance is the opening of the vulva. If resistance is given to the head at that point, the head is prevented from bulging through the vulvar orifice, and the *vis a tergo* being still active, must be spent at some places, and that place is at the point of contact of the head with the pelvic floor. Taking the head, which is bulging the perineum and presenting at the vulva, we hold it back by pressure on the perineum, or by some other method; then we are going to have the greater part of the *vis a tergo* exerted at this one point. These soft tissues of the pelvic floor are capable of yielding to a certain point, and, when they come to that point, they are going to give, and there will be a tear of the levator ani muscles and the other tissues involved. This is where, I believe, the vast majority of tears of the perineum come in. All teachers teach that the head should be held back in some way or other, so that the vulvar orifice is not allowed to expand and the head to protrude, as Nature intended; and by this misapplied force we bring about the accident we are trying to avoid. I have found in the cases in which I allowed Nature to take her course almost entirely, keeping the fingers from the head and perineum, excepting to make slight pressure and lift the head up against the pubic arch, that they have done better and I have had fewer tears, and those

that have taken place have been of a minor degree as compared with those where I tried to prevent injury by supporting the perineum. Any support of the perineum whatever is pernicious. I believe that all the teachers and all the books are at fault in that respect. Nature did not mean to have the head held back and have the whole force spent on one part, when we have the elasticity of all the soft parts well anchored, so as to yield and to give room for the head to pass. Supporting the perineum prevents the proper stretching of these tissues, and prevents any good they may do in bulging the perineum and forcing the vulvar orifice open.

Dr. Shimwell:—I am exceedingly sorry that some of my friends who have used this method successfully have not spoken. Dr. Baldy has raised the objection that a large head could not be born transversely, but the same objection applies to the antero-posterior position as well. He overlooks the fact demonstrated by the mathematical figure, that we gain, as the chin is delivered, a fraction over one and a quarter inches. The head is born without impinging on the soft tissues of the pelvis.

I have tried this method successfully for 1½ years, both in primipara and in multipara. I have used it both in cases terminated without instruments and in those where the forceps have been required on account of loss of tone or from malformation on the part of the head or of the pelvic outlet.

In regard to Nature—Nature is not always a good worker. If so, why should we have a disproportion between the head and the pelvis? The outlet should be made equal to the head. With regard to the increase in the size of the head with advancing civilization, I know that; but is the pelvis unchanged? Is it not lessened? Has it not changed its size and shape?

The points advanced are, I think, no argument against the method. It is a safe method; it is an easy method; and the delivery is accomplished with perfect safety to the child and to the mother.

SOCIETY NEWS.

The Tri-State Medical Association of Arkansas, Tennessee and Mississippi will meet at Memphis, Tenn., on Nov. 20, 1890. Dr. Rogers, of Chattanooga, Tenn., is secretary.

The Tennessee, Virginia and Georgia Railroad has offered reduced rates to and from Memphis during the time of the meeting.

An Application of Benzoin.—For cleaning off smegma and greasy applications used in treating balanitis and similar conditions, there is nothing equal to benzoin. The application is painless and it cleans the surface without rubbing. It also seems to have a curative effect upon ulcerations.—*Med. Age.*

SELECTIONS.

ON THE TREATMENT OF HAY FEVER.

BY FRANK HAMILTON POTTER, M.D., BUFFALO, N. Y.

Broadly, we must look at this disease from many points of view, and consider what we have learned:

I. As to the treatment during the attack.

II. As to the local treatment; and

III. As to the general or constitutional treatment.

By the first, we seek to palliate the severity of the attack; by the second and third, we seek to prevent the attacks recurring. It is now very generally conceded that medical treatment should not be undertaken during the attack. The latter may be lessened in its severity in many ways, but thorough treatment should be postponed to the period of immunity.

We all appreciate to-day that change of locality will, in a large number of cases, prevent or stop an attack. This is a measure that can not be employed by many, either on account of the expense or other reasons. When nothing prevents this indulgence, the periodical return of the disease is a most admirable excuse for a journey, and if locations can be found where the sufferer is free from it, he would be foolish not to take advantage of that fact. Something can be done, however, to relieve the patient that must stay at home. He must obey, with perhaps more strict observance, the laws of personal hygiene than is necessary for one not a victim of the disease. He may be in certain directions more sensitive than others. For instance, he may take cold easily, and when this is so he should strive to make himself less liable to this, by the proper employment of the cold bath, the judicious selection of clothing, etc. Or certain articles of diet may disturb him, and then, of course, they should be avoided. We can not repeat in detail what is so well known to the profession, but simply mention the importance of hygiene in the conduct of a case of hay fever, because we believe it has much to do with the comfort of the patient. During the attack the nasal passages are generally inflamed and very sensitive, and a watery mucus is constantly flowing from them. They should be washed out frequently with some bland, unirritating solution, and then the surfaces covered with a coating of an oil to protect them from dust. When dust or pollen is especially offensive, a small piece of fine sponge inserted into each nostril will still further protect them. Cocaine has, on account of its peculiar properties, come into almost universal use by hay fever patients. There is danger in its use, and when given to a patient he should be told that too frequent spraying of the nose with it will very likely disturb the nervous system and produce restlessness, sleeplessness, and the like. It should be applied after the nose is washed clean, before the oil is used. A 2 or 4% solution is all that is required.

Internally a combination of atrophia and morphia is useful. They must be given in small doses frequently

repeated. Sulphate of atrophia 1-200 gr. and muriate of morphia 1.32 gr. is a good proportion. It has, occasionally, been my good fortune to stop or prevent a threatened attack by this treatment. Success with it, however, is not universal, and it can not be considered a specific.

We have now to consider the management of the patient when free from the disease.

Looking first to the local treatment, we find that we must seek to relieve a general hyperesthetic state of the nasal mucous membrane, and also in the vast majority of cases to remove lesions of an obstructive character. The means employed for the correction of the latter often serve to relieve the former, and thus it would seem that they are frequently dependent the one upon the other. These obstructive lesions are of many kinds and may be found either of the hard or soft tissues—frequently they are of both. They may be slight and projecting or so large that they prevent breathing through the nostrils. They may be hypertrophic or neoplastic in their character. Whatever may be their organization, they should be removed. This is especially so if they cause contact between the walls of the nostrils. The pressure this contact produces is not only a source of local irritation, but causes reflex symptoms, widespread and aggravating. It is not our purpose to describe the methods now adopted to get rid of these obstructions. That belongs to the realm of the specialist. It will suffice if we are able to impress upon each one here, that these things must be looked into and corrected in order to give hay fever patients the benefit of the best treatment. We are not likely to control the disease unless this is done.

Where the operative treatment does not relieve the highly sensitive condition of the nasal mucous membrane, or again, where the latter exists without obstructive lesions requiring operations, then the hypersensitiveness can be controlled by mild and superficial alteration of the nerve ends found in the membrane. This is an important part of the treatment, frequently, in my opinion, overlooked in the management of these cases. Now, as to the general or constitutional treatment, simultaneously with the correction of the local disease, we must ascertain in a systematic manner the life history of the patient, particularly as to hereditary influences, temperament, etc. In the majority of cases we find this disease appearing in persons of the so-called neurotic habit. They may also show other departures from the normal that must be taken into account. We must consider their personal hygiene, the diet, exercise, bathing and so on. In a word, we must strive to place them in a condition of the greatest resistance. This is so easily said and so hard to accomplish, that we must frequently be content with an approach at what we aim rather than its full realization. In addition to all this, drugs have here an important place, and will well repay the difficulty in finding the proper combination for any given case. Nerve tonics and alteratives have the first consideration.

Mackenzie, of Baltimore, who is inclined to consider the disease as a pure neurosis, relies much upon the following formulæ:

I. ℞ Zinc phosphid., - - gr. 1-1 6
Quin. sulph. - - - gr. ij.
Ext. nuc. vom., - - - gr. ¼.
M. Ft. pil. no I.
S. To be taken before meals.

II. ℞ Liq. Arsenic, et hydrarg., iodid., gtt. iii, ad. v.
S.—In a wineglassful of water, after meals.

These are really valuable, and will indicate the kind of remedies to be employed. Besides those in the above combination, we find recommended by various observers belladonna, hydrocyanic acid, valerian, assafetida, musk, lobelia amber, the bromides and iodides, chloral, opium and ehoscyamus. Iodine, in some cases, will be found of great value. A very pleasant way to prescribe it is in the form of hydriodic acid. The important point, as already suggested, as far as drugs are concerned, is to find the formula that will act with benefit upon a given case. This will often tax the patient and skill of the physician, but frequently, after repeated trials, success will follow when least expected. One or two other things deserve mention. The cold douche to the spinal column has a decided therapeutic value in these cases; most authors, from Gordon, who first, in 1829, mentioned it, to Bosworth, have regarded it with great importance. The latter author makes some pertinent suggestions as to its application. It is something more than a cold bath. The water must be dashed against the spine either by means of a shower bath or else by an assistant. A simple method is to sit in the bath-tub and press a sponge full of cold water over the back. The intermittent application of cold in this way acts as a general tonic to the whole nervous system. The patient feels better at once; and after becoming accustomed to it, considers the day not rightly begun without it. If this paper aimed to be exhaustive, many other details in regard to treatment would have to be studied. What has been said, however, will indicate to a slight extent the manner of dealing with hay fever cases. It is a broad subject, still far from settled. And this being so, it is becoming in any one undertaking the treatment of these patients to recognize its complexity, and above all to remember that various factors that enter into it, that it has a local as well as a general element, and that the best treatment will consist of special and constitutional therapeutics combined.—*Buffalo Med. and Surg. Journal.*

PÆDIATRIC HINTS.

BY DR. ABRAHAM JACOBI.

Always teach a nurse that a child cannot swallow as long as the spoon is between the teeth; that it is advisable to depress the tongue a brief moment and withdraw

the spoonful at once, and that now and then a momentary compression of the nose is a good adjuvant.

The taste of quinine is disguised by coffee, chocolate and simple elixir.

Powders must be thoroughly moistened; unless they be so, the powder adhering to the fauces is apt to produce vomiting.

Inunctions require a clean surface, and are best made where the epidermis is thin and the net of lymph-ducts very extensive, as on the inner aspect of the forearm and the thigh.

Babies, after having taken opiates for some time, demand larger and sometimes quite large doses to yield a sufficient effect.

Febrifuges and cardiac tonics, such as quinine, antipyrine, digitalis, strophanthus, sparteine, convallaria, etc., are tolerated and demanded by infants and children in larger doses than the ages of the patients would appear to justify.

Mercurials affect the gums very much less in young than in advanced age.

The rectum of the young is straight, the sacrum but little concave, the sphincter ani feeble and self-control is developed; but gradually, for these reasons, rectal injection is allowed to flow out or is vehemently expelled. Therefore, one which is expected to be retained must not irritate. The blandest and mildest is a solution of six or seven parts of chloride of sodium in a thousand parts of water (teaspoonful salt to quart water), which serves as a good vehicle for medicine unless incompatible with the latter. The injection must be made while the child is lying on its side (preferably the left side), not on the belly, over the lap of the nurse, for in this position the space inside the narrow infantile pelvis is reduced to almost nothing.

In many cases of intense intestinal catarrh, large and hot (104° to 108° F.) enemata will relieve the irritability of the bowels and contribute to recovery. They must be repeated several times daily. When there are many stools, and these complicated with tenesmus, an injection, tepid or hot, must, or may be made after every defecation, and will speedily relieve the tenesmus.—*Archives of Pediatrics.*

Intestinal Obstruction.—Jessett (*Med. Press and Circular*) thus sums up a valuable article:

1. Obstruction of the intestines the result of constricting bands or volvulus are always met with either in the small intestine or the sigmoid flexure.

2. The most common cause of bands are old peritonitis, local or general, Meckel's or other diverticula may be the cause of constriction of the bowel by snaring or twisting.

3. The predisposing cause of volvulus consists in elongation of certain segments of the intestine, abnormal length of the mesentery, adhesions, or unequal peristaltic action.

4. The higher in the intestine the obstruction the more severe usually are the symptoms.

5. All cases of obstruction should be treated by early abdominal section, and if possible reduction of the constricted portion of the intestine by dividing of constricting bands or untwisting a volvulus, that is if the gentle insufflation of hydrogen gas fails to effect reduction.

6. In all cases where the intestine is very distended, it should be freely incised and its contents evacuated.

7. In all cases in which the constriction is irreducible lateral anastomosis by approximation discs should be practiced so as to exclude permanently the seat of obstruction from active fæcal circulation.

8. In cases where gangrene has taken place in the loop of constricted intestine, it should be excised, and the portion of intestine above and below the seat of constriction should be united by lateral anastomoses by approximative plates; the divided ends being invaginated into themselves.

9. All bands and diverticula should be removed when practicable at the time of the operation; in the case of volvulus, if the mesentery is abnormally long it should be shortened.

10. That enterostomy, or the formation of an artificial anus, should never be performed unless it is found to be absolutely impracticable to re-establish the continuity of the intestinal canal by dividing the constricting bands by enterorrhaphy or by means of lateral apposition as described.

Chloroform.—I will conclude by giving a series of "practical conclusions," derived from studies of the subject by experiment upon animals, which do agree with observations upon the human subject. And I consider it a matter of no slight congratulation that they were presented at the late International Congress by one of our countrymen, Professor H. C. Wood, in his address on anæsthesia. They have been lately published in nearly all the journals, but they will bear repeating. The closest examination fails to detect any flaw in them, or to find any point which is not supported and which cannot be substantiated by clinical records:

1. The use of any anæsthetic is attended with an appreciable risk, and no care will prevent an occasional loss of life.

2. Chloroform acts much more promptly and much more powerfully than ether, both upon the respiratory centers and upon the heart.

3. The action of chloroform is much more persistent and permanent than that of ether.

4. Chloroform is capable of causing death either by primarily arresting the respiration, or by primarily stopping the heart, but commonly (sometimes) both respiratory and cardiac functions are abolished at or about the same time.

5. Ether usually acts very much more powerfully upon the respiration than upon the circulation, but occasionally, and especially when the heart is feeble,

ether is capable of acting as a cardiac paralyzant, and may produce death at a time when the respirations are fully maintained.

6. Chloroform kills, as near as can be made out, proportionately four or five times as frequently as does ether.—Reeve, in *Med. News.*

A New Method of Producing Local Anæsthesia.—According to the *Moniteur Therapeutique*, local anæsthesia can be readily induced by simply discharging the contents of two or three syphons of aerated water upon the part. The anæsthesia thus induced is said to last about five minutes.—*Med. Age.*

The *American Lancet* says that a five per cent solution of chloral hydrate will clear the hair of dandruff and prevent alopecia from that cause.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service.

from october 6, 1890, to october 25, 1890.

Hutton, W. H. H., Surgeon. Detail as chairman Board of Examiners, revoked; ordered to Washington D.C., for temporary duty. Oct. 14, 1890.

Wyman, Walter, Surgeon. To inspect quarantine stations. Oct. 14, 1890.

Long, W. H., Surgeon. Detailed as chairman, Board of Examiners. Oct. 14, 1890.

Sawtelle, H. W., Surgeon. Granted leave of absence for five days. Oct. 13, 1890.

Gassaway, J. M., Surgeon. Granted leave of absence for thirty days. Oct. 11, 1890.

Irwin, Fairfax, Surgeon. Detailed as recorder, Board of Examiners. Oct. 14, 1890.

Ames, R. P. M.. Passed Ass't Surgeon. Granted leave of absence for thirty days. Oct. 14, 1890.

White, J. H., Passed Ass't Surgeon. Granted leave of absence for thirty days. Oct. 24, 1890.

Pettus, W. J., Passed Ass't Surgeon. To proceed to Vineyard Haven, Mass., for temporary duty. Oct. 9, 1890.

Perry, T. B., Assistant Surgeon. Ordered to examination for promotion. Oct. 9, 1890.

Kinyoun, J. J., Assistant Surgeon. Ordered to examination for promotion. Oct. 10, 1890.

Condict, A. W., Assistant Surgeon. To proceed to Baltimore, Md., for temporary duty. Oct. 18, 1990.

Resignation.

Ames, R. P. M., Passed Assistant Surgeon. Resignation accepted by the President to take effect Nov. 15, 1890. Oct. 14, 1890.

USEFUL FORMULÆ.

Peterman's Roach Food.—

℞ Borax, - - - - ℥xxxvij.
Starch, - - - - - - ℥ix.
Cocoa, - - - - - ℥iv.

Mix, divide into quarter, half and one pound cans.—*Drug. Circ.*

Neuralgia.—The first one has cured a number of stubborn cases of neuralgia, after various other remedies had been used with only palliative effect. In migraine, facial neuralgia or neuralgia growing out of chronic catarrh, sciatica, etc., Brown-Sequard's and Gross' formulæ for neuralgia are nowhere in comparison with this description:

℞ Iodide of arsenic, - - - gr.j.
Ext. belladena,
Valerianate of morph., - - aa gr.viij.
Pulv. ext. gentian, - - - gr.v.
Fl. ext. aconite root, - - gtt.v.

Make pil. mass, and divide in 60 pills.

Sig.: One to three in twenty-four hours.

Hay-Asthma or Hay-Fever is commented on in an article by Dr. John Aulde, in the *Med. and Surg. Rep.* As an external treatment, he suggests peroxide of hydrogen with glycerine as a local spray, and in connection with this arsenite of copper in tablets, 1-100 grain in each, one before meals. The following formula also finds favor in many cases:

℞ Nitroglycerine (1% solution), - gtt.v.
Tinct. rhus toxicodendron (recent), gtt.xii.
Ext. grindelia robusta, - - f℥iv.
Ext. berberis aquifolium, - - f℥j.
Tinct. prickly ash (with Jamaica rum),
q. s. to make, - - - f℥vj.

M. S.: Take two teaspoonfuls in a little water after meals.—*Am. Prac. and News.*

Treatment of Jaundice.—Dr. L. E. Samuel says: I have tried many things for the relief of functional jaundice; many drugs highly lauded by "authorities" have in my hands proven of no value;others have seemed to arrest the progress of the trouble and to aid in slow return to health. The most efficient combination I have ever found is as follows:

℞ Sodii phosphatis, - - - - ℥ij.
Aquæ pur., - - - - f℥j.

M. et ft. solut. et adde:

Tinct. nucis vomicæ, - - - f℥ij.
Tinct. gentian, - - - ad f℥iv.

M. Sig.: Teaspoonful three times a day.

This will often give relief where every other thing has failed to do so. If it prove too laxative, a smaller dose may be administered; but, under ordinary circumstances, the dose here given will be all right.

The same formula may be given with advantage in "biliousness," or trouble with the duodenum, or even in certain forms of dyspepsia.—*Index.*

ORIGINAL ARTICLES.

THE MOTIVE AND METHOD OF PELVIC SURGERY.

BY JOSEPH PRICE, M.D., PHILADELPHIA.

Read before the Southern Surgical and Gynæcological Association, at Birmingham, Ala., November 10, 1890.

The peculiar position assumed by the opponents of pelvic surgery, and o those who pretend to obviate its necessity and disprove its justifiability in many cases in which the experienced surgeon can see no other way out of the difficulties he encounters, is sufficient explanation for the presentation of this paper before your Society.

Pelvic surgery must be considered apart from abdominal surgery. It is distinct from it, both in the nature of the lesions dealt with, in the difficulties it presents, and in the complications and embarrassments to routine technique.

A little detailed consideration will suffice to explain this point. The drainage of a large suppurating abdominal cyst through the abdominal wall used to be a common manner of allowing nature to complete an operation with which the surgeon could not successfully cope by his art. If we look over the records of pelvic surgery of later years, we find that the same method has been tried and recommended in the surgery of pelvic abscesses, etc. Incomplete surgery of this sort, together with its unsuccessful and tedious termination, probably gave rise to the method of attempting to deal with disease of purulent nature in the pelvis by puncture through the vagina. Adhesions that cannot but be barely separated by all the delicately refined force of the skilful finger are the Bluebeard of the unpractised, and an easier method of dealing with them without touching them is one of the intrenchments of bad work not yet argued out of the field of surgery.

Nowhere as much as in pelvic surgery does the distinction between the general surgeon and the specialist in pelvic disease stand out so clearly. Pelvic adhesions in appendicitis, for instance, Mr. Treves would deal with by the knife. If this is feasible, why not put the knife to ovarian and tubal abscess, to all intestinal fixation by inflammatory processes and the like? The very suggestion of such method to the mind of the specialist accustomed to deal with all the complexities of pelvic surgery is fraught with evil, and this mere suggestion only makes it clear that general surgeons, in so far as they are entirely wedded to the knife in removing disease, fall short of the demonstrated harmfulness of its application in pelvic work. A careful observation of the surgery of the grosser abdominal kind serves clearly to show that abdominal surgeons even,especially those of the earlier period, are apt to fall short in the attainments of pelvic surgery, by applying only the methods of abdominal surgery to pelvic disease. The truth of this proposition will become more apparent if it is considered how few, practically, of the elder ovariotomists have been really successful in dealing with pelvic disease. Pelvic surgery in reality is a much later branch of the art, and needs a separate niche in the records of its accomplishments. The fact, then, that a separate division of the surgery of the general abdominal cavity has been created is clearly suggestive evidence that the motives and reasons for such surgery are just as clearly defined.

What is it that has differentiated this division from the surgery of the general abdominal cavity? Clearly, first, its pathology. The gross lesions of the ovarian cyst could easily be distinguished, but how many women perished from the concealed misery of a pelvic-bound dermoid! The enormous fibro-cystic tumor of the uterus, in most instances, could be clearly made out, yet what of the innumerable multitudes of those who have fallen victims to hæmatocele, so called, to cellulitis —yet a shroud for mummified imbecility, to pus in the tubes and ovaries, and to peritonitis and childbed fever —all visitations of Providence.

The careful observer of clinical manifestations looked for a new pathology in certain diseases of women characterized by them, and the discovery of this newer pathology gave birth to newer modes of treatment, forever to depose poultices and opium—fatal Circe's cup to the patient, though soothing to the surgeon of yore.

From the initiation of this new conception of the cause of some of the general manifestations of disease hitherto obscure, a new rationale of procedure arose, and to this we must now look. First of all, successful pelvic surgery cannot hope, unless exceptionally, to deal with pain alone. Pain is a manifestation too general to be dealt with specifically by surgery, unless in the presence of a well-defined lesion. Hence, just in proportion that an operation is done to relieve a symptom only, just so far will it be likely to be a failure. The exceptions will prove the rule. These are the cases likely to fall into the hands of the electricians, and likely also to return to the hands of the surgeon with a lesion no longer difficult of discovery. The methods of the electrical treatment all tend toward this end. The indiscriminate intra-uterine application, curetting, and the like, all stand on the same ground. Further, just as it is undesirable to operate in the absence of a well-defined lesion, so the motives for operation may be clearly set forth by a well-defined series of indications and conditions, all of them founded upon a real pathology. The existence of general pelvic adhesions, by which the intestinal viscera are tied fast to the uterine system, whereby all the functions of both systems are interfered with, constitutes one of the most annoying indications, for the relief of which there is often urgent necessity. Here we are opposed by the "cellulitis" doctrine and the electrical panacea, and taught to "melt" down adhesions like snow before the

sun, and other poetic metaphors, useless as music, which nowhere else than in fable can subdue savagery. Nowhere but in fable will adhesions melt away. A number of years ago there appeared in the "Transactions of the American Gynecological Society" a lengthy consideration of alleged cures of ovarian cyst by electricity. Many years before there appeared learned discussions on Perkin's tractors and Berkeley's tar-water. The electricians yet talk learnedly of the undetermined place of electricity in the treatment of ovarian cyst, but tar-water, and tractors have gone to their long rest. The time must yet come when the claims made for electricity as an universal panacea must be exploded, and its real, limited, and narrow horizon of usefulness be well defined. The pernicious effect of so called cures of reported complicated cases, adhesions, inflammations, and the like, by men without training, who look only at the amperemeter while they adjust a clay pad or introduce a galvanic sound, is not be be overestimated. I have repeatedly shown, by exhibited specimens, the fallacy of the claim of exact diagnosis made by these men, and the arguments are irrefutable. Claims are nothing when refuted by facts. I believe that the only position assumed by the electricians that has the slightest foundation in fact, is that electricity will sometimes control hæmorrhage and relieve pain. That it cures either is not proven. I expect that this expression of opinion in regard to electricity will be construed as an admission of the efficacy of that mode of treatment.

Now, apart from general adhesions referred to above, there is a class of diseases separate in itself and often indistinguishable as a gross lesion, which it must be considered, though territorially small. I refer to fimbrial occlusion. Here is a condition which often, in protracted suffering not yielding to well-directed, non-meddlesome treatment, exploratory incision may often reveal. It is obvious that all the electricity of all the dynamos and batteries in existence cannot break up and negative the pathological effects of such lesions as these here shown. You will see that the adhesions are as strong as the tube itself, nay further, there is often an inflammatory constriction of the intestine, as strong as the intestinal wall itself, which we may as soon expect to melt away as the adhesive, constricting bands.

We have in this condition a corresponding one of complete sterility, lancinating pain and general discomfort, and where must we find relief unless in the removal of the offending lesion? Electricity, we are encouraged to believe, will make each fimbrial adhesion to soften as wax before its genial flow, free each part and fibre of adherent fimbriæ, and envelop the egg-producing ovary with the nursing fold of a restored fimbria. I beg you all examine these specimens and honestly decide whether it is not all a delusion and a lie.

Not long since I received a letter from a well-known advocate of electricity and conservatism, flattering in its approval of my results, and coinciding for the most part with all my expressed opinions concerning the treatment of diseases of the kind here discussed, but begging a place for electricity, because there must be a place for those men who cannot get results by surgery. Is such a position fair, is it honest, is it scientific? The argument is all the stronger, recollect, because the name of this man is prominently quoted in all electrical discussions as a writer of a book and as an authority.

The newer pelvic surgery attempts to relieve chronic displacements of the uterus, by gentle means, not forcible. It recognizes the danger of forcible interference with the sound, and when it reads the records of violent inflammations set up, of death by hæmorrhage from such interference, it agrees that it is a condition, not a theory, that confronts us, and rather resorts to direct surgery to restore a displaced uterus, than to force out of adhesions by breaking what it cannot afterward control. The lessons learned by surgery of this sort teach us that uterine displacements not only involve the uterus, but are complicated by adhesions of every variety, tubal, ovarian, appendical, intestinal, and that these cannot be carelessly or forcibly dealt with, unless they are put directly under the eye of the operator, and their complications thereby under control. The modern latter-day pelvic surgery recognizes the undiscovered frequency of extra-uterine pregnancy. It sees in it a lesion deadly from its inception until its end. It recognizes and proves, not theoretically, that all its multidudinous complications can be dealt with in no other way than surgically, and has fought its way up to what must be the universal abandonment of all other theoretic modes of treatment.

It shows the vicious position to all progress and real surgery, assumed by pseudo-surgeons who pose as innovators, without either knowledge first or second-hand, who prate learnedly of morality and infanticide, who urge the claims of an impossible fœtus against the life of the mother of the family. For a monumental record of ignorance such as this there is no excuse. Its effects are more vicious in surgery than is *Kreutzer Sonata* to family morals. Reputable journalism should banish such sensation-mongers from its columns. I might thus continue along the various paths of pelvic surgery, showing at each step that the motives of its art are preservative, logical and honest; that it deals with disease as it is found, not as it is imagined; that it takes the short road and the least painful to establish a cure; that it would remove an offending useless body or organ rather than tolerate it as a perpetual menace to the remaining economy. With such an aim, its utility cannot be questioned; its honesty is determined; its permanency assured.

Let us consider now for a little its methods. These have for their insignia, directness, simplicity, regularity, varied according to the variations of individual cases. It frees all operation from the nature of a mere exhibition, and while it would admit observers, it does so to teach, not to hippodrome. It places each observer at the vantage-point of an intellectual spy, and gives him an insight into both the abuses of useless surgery and the pretenses of palliation.

The steps of each operation after incision can only be determined by exploration. Primarily in pelvic disease adhesions are likely first to claim attention. These may be localized or general. It is first to be remembered that there are some cases so complicated by adhesions, that they must be abandoned as exploratory only. These are in the main, I believe, malignant. The adhesions are apt to be rendered distinctly worse by prolonged electrical treatment. This has been observed in many of my own cases. This point should be a matter of direct investigation in every case that comes to us for operation.

In dealing with adhesions, the first point to be sought after is to find a crease or crevice, into which some progress can be made. This is a matter often of the keenest difficulty; many cases which at first appear utterly unassailable, will by perseverance yield to well-directed effort, and from that time on the enucleation of the mass will be comparatively easy. It is to be remembered that violence is not to be attempted. Sufficient force to accomplish the separation of adhesions, if it be violent, cannot be other than harmful. I cannot better express it or explain it than by saying that the force should be as a gentle momentum, not as a velocity and momentum. In separating intestinal adhesions, they should be broken as far from the bowel as possible. The farther away, the less liable will they be to bleed, and the absence of hæmorrhage is a great comfort in these cases. The strings of adhesions may be dealt with according to their size, it sometimes being best to remove them, at others there is no necessity for this. In doubtful cases their removal is the better surgery. All bowel adhesions should be carefully examined after their separation. By so doing fæcal fistulæ will often be avoided by the careful placing of an intestinal suture. It hence is apparent that no pelvic surgery should be attempted until the operator is competent to deal with intestinal wounds, even to resection and anastomosis. Once the adherent mass is removed the ligature should be applied close up to the cornu uteri. The ligature should not be so heavy as to resist knotting, nor so light as to break easily. The ordinary surgical knot is the safest of all knots with which to tie the pedicle. It constricts more evenly and certainly, and will slip less readily. The leaving of sufficient button is of the greatest importance to prevent slipping of the ligature. In dealing with all abscess cavities or pus in any shape, all debris should be cleaned out by scraping, if necessary, and careful drenching of the pelvis and its recesses practised. The procedure itself will be a comfort in doubtful cases, since it is the best of all methods with which to relieve shock, and cannot possibly do harm. There is nothing doubtful or theoretical in this advice. I use it constantly in cases so ill that the ether is taken away almost as soon as the incision is made, and its effect is marvellous. In the use of drainage, it is best to err on the safe side, and I prefer to place a drainage tube in a doubtful case. The tube I prefer I here exhibit.

In the treatment of extra-uterine pregnancy my urgent advice is, to operate without delay when the symptoms point to the disease, with the assurance that delay will only complicate matters, and sacrifice the life of the mother. I have now so often proved the correctness of this position, both by my own cases and those of others, that I shall not dwell on it here, but illustrate it further in the discussion. Drainage in these cases is to be followed out as a routine procedure, unless in unruptured tubal pregnancy, which, if it is found, is a matter of congratulation both for mother and surgeon, and family. In the treatment of appendicitis I urge you to accept the teaching of pelvic surgery, as reinforced by scientific pathology. Remember that this lesion is to be considered as the real presence of a foreign body, and that its removal is just as much called for as is that of a calculus from the urinary or gall-bladder. That there are perityphlitic abscesses, is no argument against the fact that they are rare and the exception. These cases are often to be treated, on account of delay, by simple incision and drainage, but where it is possible the appendix is to be removed.

I have thus endeavored briefly to bring before your society the salient points of pelvic surgery in the light of its most recent successes and conflicts. I have endeavored to show that its field is not one of experiment, or palliation, that it strives in all cases to remove the offending body in order to conserve the rest of the economy; that its tenets are founded on philosophy and fact, not fiction, and that its worth lies in its proved results.

It has reached a standard not to be measured by tyros and dabblers, without instinct of the art, and without energy to train for that of all things so difficult to attain, the conception of the limitation of all art so as to comply with the limitations of nature and natural laws. The surgery that plucks out the eye or casts aside the limb, to save the eye or the limb, or the life, is greater, better and wiser, than a sentiment that preserves a shell to inclose a ruin.

EXPERT TESTIMONY.

BY SYDNEY B. WRIGHT,

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Read before the Tri-State Medical Society of Alabama, Georgia and Tennessee, at Chattanooga, Oct. 15, 1890.

The word evidence in its legal acceptation includes all the means by which any alleged matter of fact, the truth of which is submitted to investigation, is established or disproved.

The usual means of establishing or disproving matters of fact under inquiry are the statements made by witnesses in court under a legal sanction, which statements are usually denominated testimony.

The mathematician can easily convince his pupil that the square on the hypothenuse of a right angled triangle is equal to the sum of the squares on the other

two sides. But none save mathematical truths are susceptible of that high degree of evidence called demonstration—excluding all possibility of error.

The chemist shows his audience the make-up of an alloy by subjecting it to the crucible, and thus segregating it into its component elements.

The physician administers this powder or that po tion because he is able to argue by induction that it is the thing, because for scores of years this same treatment has proved successful in eradicatiug this same disease from the system.

But the attorney's task is more difficult. Rarely has he the opportunity of an *ex-parte* trial, nor can he make use of evidence obtained from intuition, induction or demonstration; nor can he, in the great majority of intrust his case to the judicial crucible with any surety of having their verdict influenced by the light of science.

The true question in trials of fact is not whether it is possible that the testimony may be false; but whether there is sufficient probability of its truth—that is, whether the facts are shown by competent and satisfactory evidence. The general rule in judicial tribunals is that the witness must confine himself to facts relevant to the issue joined and leave the conclusions from those facts to be determined by the court or jury under oath. This is so when the case is plain. This is so when there are no long links in the chain of testimony, when eye-witnesses and ear-witnesses are available to show every detail. But frequently in the journey of proof there are broad estuaries to span without piers seen by the eye or sounded to the ear, on which to rest the bridge of proof; and this is the emergency in judicial investigations where the medical expert is most needed. For instance: H. is being tried for poisoning W. In H's possession is found a remnant of arsenic, accompanied by other suspicious circumstances proven by the State. The question will be whether W. was poisoned by arsenic. The fact that other persons who were poisoned with arsenic exhibited certain symptoms which experts affirm or deny to be the symptoms of that poi son is deemed relevant.

Extra knowledge on any question of science, skill, trade, business or other matters requiring special knowledge, qualifies the person thus informed to give opinions in courts of justice, contrary to the general rule that witnesses must confine themselves to the facts and leave the conclusions from those facts to be determined by the court or jury.

An opinion is a judgment which the mind forms on any proposition, statement, theory or event, the truth or falsehood of which is supported by a degree of evidence that renders it probable, but does not constitute absolute knowledge, truth or certainty. These opinions or conclusions of judgment which make up such opinions of experts are the same in substance as the verdict of a jury or judgment of a court, which is nothing more than the opinion of such jury or court as to what is established by the facts in the case. This conclusion or opinion in the latter case is given under the sanction of an oath. So is that of an expert, with this difference in the two cases: the court or jury is under oath while they are making up their opinions upon the facts in the case, and these facts, upon which the opinion is predicated, are also submitted to the minds of counsel and parties. The facts are also given by the common witnesses under oath, upon which the jury or court makes up an opinion. The expert, on the other hand, comes to the result constituting his opinion which is to be received in evidence from his own private study, experience, observation and reflection, the private judgment of a witness given under oath.

Of all the learned professions we find most frequently physicians deposing as experts on the witness stand, but in spite of this fact many members of the profession are inclined to look upon medico-legal practice as an unnecessary addition to the ordinary. But few of any repute practice long before they find themselves in situations of difficulty from some accidental occurrence of cases demanding medico-legal investigation.

A medical man is called to attend A, who is suffering from a wound. In spite of best treatment death ensues. In his dying statement about the cause of his pending dissolution he accuses B of stabbing him with a knife. At the death of A the functions of a medical man end and those of a medical witness begin. The doctor can't escape giving evidence. He is summoned before the Coroner to describe the nature of the wound which caused the death, and there deposes that the wound was inflicted by some blunt instrument such as a club. But in spite of this opinion, the dying declaration goes to the grand jury, an indictment is found, and upon the trial of B for murder the same doctor is again called to iterate his previous testimony to impeach a part and thus weaken the whole of A's dying declaration. He must there be prepared to answer numerous questions all bearing upon the legal proof i e, by what means this particular wound was inflicted, the direction, size and nature of the wound, with other circumstances tending to show accidental, homicidal, or suicidal means, whether any and what statements were made by the dying man, the exact physicial condition and surrounding circumstances under which those statements were made; for instance, whether the deceased had expressed hope of life at the time of or after said declaration.

This professional relationship between physician and patient gives rise to many emergencies on the criminal as well as civil side of the courts in which the physician must go upon the witness stand, regret it however much he may. No position is perhaps more embarrassing to a physician than that of an expert witness to whom partisanship is imputed by adverse counsel, but there is no alternative than to obey the subpœna in criminal cases, and always in this State in civil cases where the State is not a party he must obey the subpœna, or notify the officer at the time of service of subpœna that the witness is a practicing physician and

claims the professional exemption from personal attendance on the judicial tribunal, a return by the officer to which effect will be notice to the party to resort to his statutory alternative of taking the physician's deposition at his office. There may be a question as to whether the privilege must be claimed at the time of service of subpœna to exempt the physician from personal attendance. It is always best to do so in order to escape possible annoyance of a forfeiture for non-appearance and attendant attachment by which attempt would be made to bring a physician in. If he is not a material witness to facts, however, it will be impossible for the party needing his presence truthfully to make such an affidavit as will warrant the issuance of an attachment. And even if he is a witness, not simply an expert, the forfeiture will be set aside by proper application to the Court showing that it was taken against a physician in active practice.

Many think it a great hardship to force medical men in courts to attend from time to time for the small pittance of one dollar per day. A subscriber to the *Medical Magazine* of the University of Pennsylvania has written to the editor of that paper for information in regard to the power of a court to compel the attendance of medical men, with no compensation for their time and technical knowledge other than that ordinarily awarded to witnesses.

The question, by reason of its interest, was referred to an eminent member of the Philadelphia bar, who replied that such a question may occur to a Doctor of Medicine: First, where he will be called upon merely to testify as to the facts within his knowledge. Secondly, when he has knowledge of medical facts in regard to a particular case and is called upon to state these facts and to give his professional opinion upon them. Thirdly, where he has no knowledge of the facts and is called upon merely to give a professional opinion.

Contrary to the law of Pennsylvania, in neither of these three cases would the physician be compelled to go personally into court. He can be forced, however, to depose at his office in either of the first two instances for fees usually given to witnesses. In the third case he may claim extra compensation on the ground that the professional knowledge of a dootor is his property which he cannot be compelled to part with without compensation.

One will rarely force on the stand an expert purely as such without first hearing his opinion on the particular subject and if this opinion is sought and request of attendance made either by the party, his agent or attorney before service of subpœna or between said service and trial, an implied promise of payment arises for professional services rendered, as plainly as when that promise arises upon a call to the litigant's bedside. Certain States have passed laws allowing extra compensation for experts to be fixed by the trial court.

To be an expert for the purpose of any trial may not be considered as great honor; but it is the prerogative of the trial judge to decide, subject to the opinion of the court above, whether the skill of any person in the matter on which evidence of his opinion is offered, is sufficient to entitle him to be considered as an expert.

So the profession can easily see that it is by no means impertinent on the part of counsel introducing or crossing him to inquire into the amount of experience the deponent has had, or to know the peculiar advantages he has had for the acquisition of knowledge. After qualification as expert the witness deposes his opinions simply. Posing as an expert, he is supposed to possess an opinion of his own and not that of another. He cannot read authorities on the stand in corroboration of any opinion he may assert. The attorney may read such authority on the subject at bar approved by the expert and conceded by the court to be a standard work on the subject. On cross-examination the physician should not equivocate or evade, but answer to the point, be the effect what it will, and although he cannot read authorities, he may expect on cross examination to be interrogated upon the foundation of his opinion, may have literature quoted to him of his own profession, and be required to agree with or dissent from the opinion of the author quoted; whether he is familiar with certain works of that science, or not, and even with the latest edition. The witness must not do the objecting to questions but leave his protection to the counsel calling him. The judge will make him tell anything relevant, first, to his qualification, and then to the issue, disclose his age even,unless there are special reasons for concealing it. If he is giving evidence for the State against a supposed poisoner in his trial for murder and is asked by the defence what remedy or antidote he had employed when he was first called to attend the deceased, an eminent judge has ruled that the physician shall answer unless he believes his antidote killed the deceased, in which case he would not be forced to criminate himself.

The futile attempt is sometimes made to shield professional communications between physician and patient, but to no avail. The law does not shield these confidences as privileged, and it were well for the physician not to encourage or invite any confidences the revelation of which might criminate the patient.

A great fault with many experts in medicine is an attempt to display too much erudition, technicalities of the profession in which they are skilled, a practice to be discouraged, as nothing is more necessary to the comprehension of a jury of ordinary men and nothing more convincing to a court and bar of a physician's skill in his profession than his ability to deliver himself in plain, untechnical Anglo-Saxon. Nothing is more pedantic than professional lingo on the witness stand by a man who demeans himself as if he were addressing a report to some president and members of a medical society instead of to a jury of unsophisticated men.

It will be asked whether a physician should prepare for any particular expert examination. Surely the party calling him will acquaint the expert with the na-

ture of the case if the expert has had no previous connection with it.

To this we say, it will depend upon the expert's familiarity with the subject on the abstract. By far the most numerous occasions for this kind of evidence will be where the physician has had to do with one of the litigants in a professional capacity. In this last case there is a tendency in the expert to tell all he knows, regardless of the relevancy of all or any part of it to the decision of the issue, and the expert is provoked at being stopped in his story. To illustrate: A is being prosecuted for murder. He pleads insanity, is examined by his old family physician who has treated him through spells of sickness prior to the killing, which physician is in turn put upon the stand as an expert. The question here is whether A at the time of the killing was by reason of unsoundness of mind incapable of knowing the nature of the act or that he was doing what was wrong or contrary to law. The opinion of the doctor upon the question whether the symptoms exhibited by A commonly show unsoundness of mind, and whether such unsoundness of mind usually renders persons incapable of knowing the nature of the acts which they do, or of knowing that what they do is either wrong or contrary to law, will be relevant to the issue. But it will be hard to convince the expert who has testified in that capacity alone that he is not to go into detail about the curious actions of this man years ago. The expert will do well to listen to the witnesses as they depose to the symptoms, which symptoms will be incorporated into a hypothetical case by counsel to be propounded to the expert for his opinion.

In this connection will be mentioned what evidence will be relevant in the trial of malpractice suits against physicians.

Every person, lawyer, doctor or other professional man who offers his services to the public generally, impliedly contracts with employers that he is in possession of the necessary skill and experience which is possessed ordinarily by those who practice or profess to understand the same art or science and which is generally regarded by those most conversant with the profession or employment as necessary to qualify him to engage in such business successfully. Mr. Justice Story says: "In all those cases where skill is required it is to be understood that it is to be ordinary skill in the business or employment which the bailee undertakes, for he is not presumed to engage for extraordinary skill which belongs to a few men only in their business or employment, nor for extraordinary endowments or acquirements. Reasonable skill constitutes the measure of the engagement in regard to the thing undertaken."

The common law rule is that everyone who enters into a learned profession undertakes to bring to the exercise of it a reasonable, fair and competent degree of skill. The nature of the implied contract between the physician called and patient calling him is not to warrant a successful operation or insure a cure; but if he does make an express contract for absolute cure the utmost diligence and skill will not excuse him should the result be unfortunate after taking pay on such conditions, and he will further be liable upon a malpractice suit for damages in the nature of a breach of warranty.

But, in defense of such suit it will be relevant to show by experts that the undertaking was impossible, in which case the law will not hold him responsible for the full extent of the damage resulting to the patient by reason of his failure after using all skill. He will simply forfeit all compensation for medicine and service.

Where there is no express contract and the treatment is a failure, at trial the question to plaintiff's expert is not whether the expert could have effected a cure, or whether ordinary skill could have done so, but whether the care and skill of the defendant's treatment, as deposed by witnesses, was ordinary care and skill.

When the expert deposes intelligently, keeps his head, and shows no partisan feeling he can hardly realize the weight that is given to his testimony. A noted writer on evidence has classified the grounds of belief in human testimony as follows:

1. The instinctive principle of credulity implanted in man's nature.

2. The general experience of the truth of human testimony.

3. The known and experienced connection between collateral facts satisfactorily proven and the facts in controversy.

Under this last heading falls all of expert testimony. Mr. Paley describes the general character of human testimony as "substantial truth under circumstantial variation." Two witnesses will rarely describe the same occurrence exactly alike. There wil always be some variation, attributable, it may be, to the eye of the beholder, or ear of the hearer, as much as to the thing seen or heard.

Law is by some of the learned professions criticised as a retrospective science. But, however true may be this imputation in one respect, it is making strides. It is no longer so necessary as formerly that an eye-witness should see, or ear-witness should hear the crime being committed in order to a conviction. Say all modern courts and the verdict of modern juries that a man may involve himself in a net-work of circumstantial evidence less easy to impeach than the evidence of one single witness testifying to his actual perception by the senses. Persons may lie; science never.

But boundaries must be fixed to the introduction of such evidence and it is essential to circumstantial proof, be it deposed by medical experts or others:

1. That the circumstances from which the conclusion is drawn should be fully established.

2. That all the facts proved should be consistent with the hypothesis.

3. That the circumstances should be of a conclusive nature and tendency.

4. That the circumstances should, to a moral certainty, actually exclude every hypothesis but the one propounded to be proved.

5. That mere circumstantial evidence, unless the chain of circumstances is absolutely complete, ought in no case to be relied on where direct and positive evidence, which might have been given, is withheld by the adverse party.

TWO CASES OF TUBAL PREGNANCY—OPERATION—RECOVERY.

BY EDWIN WALKER, M.D., PH.D., EVANSVILLE, IND.

Abstract of a paper read before the Mississippi Valley Medical Association, October, 1890.

The first case was Mrs. E. S., æt. 27 years, married four years, sterile. Had a history of uterine and tubal trouble before marriage. Since marriage she had been an invalid, suffering from pain in the right groin. The menses were always irregular; she often missed a month or two. She was unwell June 29, 1890, but in July she missed. A few days later she began to suffer severe pain in the right groin. August 1, a sanguineous flow began and continued to the time of the operation.

August 11, she was seen first in a severe attack of pain; there were no symptoms of collapse; morphia gave relief. Later an examination, under ether, revealed a soft tumor, the size of the fist, to the right and behind the uterus.

August 17, the abdomen was opened and the right tube, which was very large, was found ruptured and a large amount of clotted blood was in the pelvis. Fœtus was not found; the abdomen was irrigated with hot water, and a glass drainage tube was used. There was some vomiting and pain, but recovery followed without a bad symptom.

Drain was removed on the third, and sutures on the twelfth day.

The highest temperature recorded was $101^1/_5$° F.

Second case was seen on the day on which the first was operated upon. Mrs. W., æt. 35 years; married; one child six years old; no history of uterine trouble. Menses had always been regular. She was unwell June 18; missed in July, and soon began to suffer cramping pains, more especially on the left side. August 11, had a sanguinous flow which lasted until the time of the operation. August 14, passed shreds of membrane. Opiate was given and she was better for two days. The pains returned with greater severity. The operation could not be performed at once on account of her surroundings, so the patient was removed to the hospital. August 21, she was very weak, but at no time was there anything like collapse.

The operation was performed as in the first case.

The ovum was in the end of the left tube, which had ruptured, and was attached to the omentum also. The tube and ovary were ligated and removed and, fearing hæmorrhage from the membrane adhering to the omentum, that portion to which it was attached was removed also, as some hæmorrhage had come from the omental vessels. The abdomen was closed and drained after thorough irrigation.

Recovery was uninterrupted.

Drainage tube was removed on the second, and the sutures on the twelfth day. The patient left hospital on the eighteenth day.

The highest temperature was 100° F.

Nothing in the history of the cases, unless it was the size of the tumor, would lead one to suppose serious hæmmorrhage had occurred.

The author thinks that the present status of the question is, that with such a class of symptoms as presented in these cases, laparotomy is the safest procedure to adopt.

MEATOTOMY—HOW TO PERFORM IT.

BY DANIEL MORTON, M D., ST. JOSEPH, MO.

Read before the Missouri Valley Medical Association, Council Bluffs, Iowa, September 9, 1890.

"For who hath depised the day of small things."

I ask you to dismiss from your minds the consideration of ovariotomy, herniotomy, lithotomy and other like weighty matters, and for ten minutes to turn your attention to a paper of eight-hundred words, bearing upon a simple procedure which must be done one hundred times oftener than any of the capital operations just mentioned.

I shall not speak of the indications which call for meatotomy but confine myself to the surgical procedure alone. It is the usual custom, without preparatory treatment, to stick a bisotury in the meatus and pull it out, enlarging the opening as the knife is withdrawn, regardless of the caliber of the urethra and a future hypospadias. This is slipshod, loose, inaccurate and unscientific.

The genito-urinary surgeon must contend, in all operations upon the urethra, with an acid and germ laden fluid flowing over the freshly cut surfaces of his field of operation. One cannot remove the urine but it can be sterilized and neutralized and thus to a certain degree rendered bland and unirritating. This is accomplished by the administration of the antiseptics boric acid or saccharine and the vegetable salts of potassium, the latter being eliminated by the kidneys as alkaline carbonates. My attention was first called to the use of boric acid in this connection three years ago by Palmer, of Louisville, and since that time I have used it in the manner which he prescribes. By the use of these remedies the urine is rendered aseptic and the liability of urethral fever is reduced to a minimum.

How is one to know to what extent to slit the meatus? Is it a mere matter of guess work? Nay! verily. It is a matter of measurement. That there is a relation between the circumference of the penis and the caliber of the urethra has been established beyond peradventure. This is now acknowledged by all genito-urinary sur-

geons. Having this principle to guide us, it is a simple matter to make the calculation. Each inch in circumference of penis represents ten millemeters in circumference of caliber of urethra, and therefore if the penis be three and a half inches the caliber of the urethra for such a penis should be thirty-five millimeters and a thirty five French sound should readily pass from meatus to bulb. Inject a few minims of a four per cent solution of cocaine along the line of incision, having first constricted the penis with a bandage to prevent the rapid dissemination of the anæsthetic. With the knife, enlarge the opening to the required size, using as a guide to determine this point a bougie corresponding in millimeter to the normal caliber of the urethra. This should readily pass through the enlarged opening down to the bulb without obstruction. But, some one may say, the meatus is normally the narrowest portion of the canal, why do you cut it to full size? The answer is apparent on a moment's reflection. The contraction following the operation amounts to two or three millimeters and thus the relation between meatus and urethra is re-established.

Unless the bougie *a boule* passes readily, the most important part of the operation has been a failure, since the band which is frequently found just within the meatus has been left untouched. Dr. J. C. Olmstead, of Atlanta, Ga., a nephew of Otis, brings out this point admirably in an article published in the *Atlanta Medical and Surgical Journal*, entitled, "A Plea for the Meatus Urinarius." He says, "examination in such cases (unsuccessful operations) revealed the fact that the hypospadic slit that had been made had not reached the real source of the original troubles, namely, a tough little fibrous ring or stricture, from one fourth to one-half an inch, sometimes an inch behind the meatus." This it was that required free and deep incision, the meatus itself calling for but comparatively slight incision. The indomitable "slitter" had cut down at times to, but not through, this, from the interior commissure of the meatus and had not gone farther for the reason, I suppose, that even he had to stop somewhere and the meatus was gaping inquiringly at him and ready apparently to swallow a "polished gas pipe."

After-treatment is very simple. The passage of a steel sound following cocainization every other day for a week will prevent adhesions. The urine should be continued in its neutralized and sterilized condition until recovery.

And now if you would know the conclusion of the whole matter, (1) neutralize and sterilize the urine before operating, (2) make the caliber of meatus and urethra correspond, (3) be sure to cut the post-meatal band.

Seventh and Felix.

A Harsh Judgment.—Dr. Walter Rivington says that to improve the medical profession in Great Britain, it is necessary to diminish the overcrowding, and the too free use of alcohol.

A CASE OF ATRESIA UTERI CAUSED BY LA GRIPPE.

BY D V. WALE, M.D., JASPER, MO.

Read before the Southwestern Missouri District Medical Society at Springfield, Mo., October 14, 1890.

I beg leave to report the following case:

Miss A.S.,æt. 19 years, menstruated first at the age of 15 years. Has been regular ever since, menstruating without pain until the latter part of last January, at which time she was attacked with la grippe. She was menstruating at the time, but the flow ceased on the second day after its appearance. This was followed by severe pain in the lower part of the abdomen, and a severe cephalalgia, which lasted for more than two months, despite all endeavors to relieve it. The next menstrual period was postponed about one week (about the first of March). It was preceded by intense suffering in the lower part of the abdomen for about one week previous to the flow, the pain ceasing upon the establishment of the menses. The next menstruation was postponed about three weeks. During these three weeks she suffered severely, especially the last few days. Upon the establishment of the catamenia the pain almost entirely ceased. She has not menstruated since. The pains in the abdomen have continued ever since; they are especially severe for about one week in every four, the time she should menstruate. At tee third month after the cessation of the menstrual flow, the lower part of the abdomen was noticed to be slightly enlarged, and has continued to enlarge ever since until the operation. In the intervals of pain, the inter-menstrual period, the swelling in the abdomen would decrease slightly, each period and interval leaving her slightly larger than the preceding period and interval. About the middle (13th) of last month I examined the patient. Upon palpating the abdomen, I found a globular tumor, of a doughy feel, in its lower part. Vaginal examination revealed the distended uterus; cervix almost one inch long. I tried to introduce the sound; it passed about three fourths of an inch into the cervix, but would go no farther. I placed the patient on tonics, good food, carbolized, vaginal injections, and deferred the operation, as it was only a few days anterior to her regular menstrual period, as indicated by painful periods.

On the first day of the present month I placed the patient on her left side, introduced a Sims' speculum, and repeated the attempt to introduce a sound into the uterus, but with no better result than before. I then dilated the cervix with a Nott's steel dilator up to the seat of obstruction. I then introduced a long curved trocar into the uterus. As soon as the fluid, dark and thick, began to flow, I removed both speculum and cannula, and for two reasons: First, to prevent a too sudden withdrawal of the fluid, so as to prevent rupture of the dilated tubes, if there should be any, and rupture of the thin-walled uterus; and, secondly, to prevent the

entrance of air and micro-cocci, and the resulting septicæmia. Once a day for four days after the use of the trocar I introduced the probe, under guidance of the finger, and not the speculum, to keep the cervix patulous. The fluid continued to flow off for four days, at the end of which time the uterus seemed to be contracted down to almost its natural size. No intra-uterine injections were used, as there were no symptoms of septicæmia to indicate them. Carbolized vaginal injections were used twice a day for five days; then once a day for another five days, at the end of which time the patient was able to be up and around. There was no fever and very little pain, except upon the introduction of the trocar, from beginning to end.

I believe the severe pains—so severe as to require very large and oft-repeated doses of morphine to relieve them—which occurred just previous to the flow at the two menstrual periods after the attack of la grippe, were due to distention of the uterus, and to bursting open of the cervix before union had become firmly established.

My reasons for reporting this case are not only on account of its rarity, but also on account of what I believe to be its cause, la grippe. I find no reference to the subject of acquired atresia uteri in either Mann's great work on gynæcology, Ashhurst's Encyclopædia of Surgery, Agnew's Surgery, Pepper's System of Medicine, *American Journal of Medical Sciences*, or *American Journal of Obstetrics* for 10 years; or in Hewitt's, West's, or fourth edition of Thomas' work on diseases of women. In the fifth edition of his work, Thomas gives a description of the malady, and advises aspiration, drawing off about one-third of the fluid, repeating the operation in about 48 hours, and then making crucial incisions and dilating; while Fritch (*Krankheiten der Frauen*) advises against aspiration, recommending the curved trocar. Schroder (*Krankheiten der Weibliche Sexual Organe*) advises the use of the trocar, and warns the surgeon against making pressure over the abdomen for fear of producing rupture, or making intra-uterine injections, unless septicæmia should supervene. Courty (*Traite Pratique des Maladies de l'Uterus*, etc.) recommends incision and intra uterine injections of warm water, and, if septicæmia occurs, antiseptic injections. The operation is accompanied by so much danger (bursting of tubes or the dilated uterus, or septicæmia), that Boyer, Dupuytren, Capuron, Cazeaux, etc., recommend leaving the case to nature. But to leave such a case to nature is like leaving ovarian tumors to nature, for without operation the mortality is over 95%. With operation the mortality, with antiseptic precautions, should not exceed 10%.

As grave as the operation is, we are to shoulder grave responsibilities, and act.

Women Graduates in France.—Since 1866 the University of France has conferred 202 degrees on women, chiefly Russians and Roumanians, 35 of whom have received the degree of Doctor of Medicine.

REPORT ON PROGRESS.

SURGERY.

Bloodless Amputation at the Hip.

Every one who has had any experience in amputations at the hip knows how exceedingly difficult it is to arrest and control hæmorrhage by the application, in any of the usual manners, of Esmarch's tourniquet. Aside from the difficulty of originally applying it and keeping the elastic bandage in position, the chief trouble arises where the muscles and deep structures have been divided. There is then a tendency of the divided muscles to retract, while the coils of the rubber cord have at the same time a tendency to slip down, from the conical form of the stump, thus allowing the vessels to escape from the pressure at the most critical moment. The *Indiana Medical Journal* gives the account (taken from *Med. and Surg. Reporter*) of a method of applying the tourniquet and a modification in manner of operating advanced by Dr. Jno. A. Wyeth. The two reported cases were operated on for sarcoma of the thigh. The operation is as follows:

The patient is placed on a table with the hip to be operated upon well over the corner the of table. The limb is then elevated and the contained blood forced out by the application of Esmarch's bandage, taking care not to apply it too tightly over the diseased part lest septic matter be driven into the circulation. With this bandage still in position, two needles are now to be introduced. These needles are steel mattress needles three-sixteenths of an inch in diameter and a foot long. The point of one is inserted an inch and a half below the anterior superior spine of the ilium and slightly to its inner side. It is then made to traverse the muscles and deep fascia, passing half way between the iliac spine and the great trochanter, external to the neck of the femur, and having penetrated the tensor vaginæ femoris the point is brought out just back of the trochanter. The second needle is entered an inch below the crotch internally to saphenous opening and, passing through the adductors, comes out an inch and a half in front of the tuber ischii. In introducing the needles no large vessels are endangered. The points are protected by corks.

A piece of white rubber tubing half an inch in diameter and long enough to go around the thigh 5 or 6 times is wound very tightly above the fixation needles and then tied. The Esmarch bandage is removed and, commencing five inches below the tourniquet, a cuff is fashioned which includes the subcutaneous tissues down to the deep fascia. This is dissected up to the level of the lesser trochanter, where the muscles and vessels are squarely divided and the bone sawed through. All the vessels which can be seen are tied and the smaller ones may be discovered by relaxing the tourniquet. The remaining portion of the femur is removed by dissecting off the attached muscles, keeping close to the bone, and

opening the capsule as soon as it is reached. On lifting the ends of the bone toward the patient's navel and dividing the cotyloid ligaments from behind, the ligamentum teres is easily divided. The wound is drained and closed. Dr. Wyeth recommends that in case the patient is weak the head of the femur be enucleated at a subsequent operation although it is of course desirable to complete the operation at one sitting if possible.

Pneumotomy for Gangrene and Abscess.

Ramsay (*Amer. Jour. of the Med. Sciences—Annals of Surg.* vol. ii) reports four cases of incisions made in the lung for gangrene and abscess. One of the operations undertaken for abscess ended in death, but the other three were successful. In the case of gangrene an inch of the seventh rib was resected and the seat of sloughing discovered by an exploring needle. The lung was incised and the gangrenous area drained. Adhesions between visceral and parietal plura prevented pneumothorax. A 3% solution of carbolic acid was at first used to wash out the cavity but as this caused paroxysms of coughing it was suspended. In the second case pulmonary abscess developed in consequence of gunshot wound. Parts of the third, fourth, fifth, sixth and seventh ribs were resected and the abscess incised at the level of the third rib. Patient recovered. In the third case several ribs were resected and the abscess opened by Paquelin's cautery and packed with iodoform gauze, but as there were multiple abscesses patient died some months later from septicæmia. The fourth case was treated in a similar manner and recovered.

Sterilization of Catgut.

Larochette (*Lyon Medical—Amer. Jour. of Med. Sci.*) has thoroughly investigated this important subject. Reverdin had stated that catgut could be easily sterilized by subjecting it to a temperature of 140°C. for four hours providing it had been thoroughly freed from fat. To determine the accuracy of this statement Larochette put pieces of catgut into glass tubes which were then hermetically sealed. These tubes were placed in an oil bath and the temperature gradually raised. At 90°C. the smallest catgut was so altered as to be unfit for use, while at 100°C. the largest size was ruined. The fat was then removed from some more specimens of catgut by ether and bisulphide of carbon. On subjecting them to heat the same results followed as in the first experiment. Catgut which had been freed from fat and some not so prepared was then put into an oven and temperature raised to 145° C. After three hours that which had been deprived of fat was found to be spoiled while that unprepared was not injured save that it was less supple than before. Larochette says the sterilization is practicable if catgut from which fat has not been removed is used, if the temperature is gradually raised and if plenty of space for evaporation of water is allowed. After being thus sterilized the catgut is to be taken up by a pair of forceps which have been passed through a flame and placed in oil, containing 10% of carbolic acid, which has been previously boiled.

A New Method of Performing Gastrostomy.

Prof. Eugene Hahn (*Annals of Surg.—Centblt. f. Chir.*) has done eight gastrostomies by the following method: An incision is made parallel with the lower edge of the last lower rib on the left side which opens the abdominal cavity. A second incision is then made in the eighth intercostal space close to the junction of the eighth with the ninth rib in a direction obliquely from above downwards and outward. The peritoneum at this point is punctured by a pair of curved dressing forceps and the orifice enlarged by spreading the forceps. The thumb and finger introduced through the first openings seek the stomach at a point as near the fundus as possible, and this is grasped by the forceps and drawn out at the opening in eight inches space until it overlies the integument for a space of one ctm. all around. If the stomach is to be opened at a subsequent sitting the serous coat only is sutured to the edges of the opening in the eighth interspace. Otherwise the opening is made and the sutures attaching the stomach to the parites are passed through all its coats. The advantages claimed for the operation are:

1. A small and contracted stomach can more easily be pulled forward and attached at this point.
2. The attachment of stomach to edges of wound is more reliable than by the old method, as the union is firmer.
3. The gradual dilatation of the fistula is prevented by the firm support of cartilages of ribs, and so the escape of fluids passed in through a tube the more readily prevented.

A New Suture.

Dr. Longear (*The Physician and Surgeon*) reports a new suture devised by himself. The suture is passed through the tissues in the usual manner. The needle is then passed through the two opposing margins of skin. The amount of tissue taken up by the last step is to be only about half the thickness of the skin. The suture is now tied, and at the same time the deeper parts are approximated, the skin is also drawn together and prevented from rolling in, while the line of knots is brought to the side of the line of the wound.

Removal of Internal Saphenous Vein.

Dr. J. R. Logan (*Canadian Practitioner*) reports a case of removal of almost the entire length of internal saphenous vein for a varicose condition. The varix followed a severe crushing injury of right leg. The entire vein was varicose to within two inches of the internal saphenous openings. As patient was much troubled by

recurrent ulcers it was determined to remove the vein. After a careful antiseptic preparation of whole limb an elastic band was placed about the thigh high up, with sufficient tension to render the vein prominent. The upper portion of vein was then exposed and cut between two ligatures. The lower part of vein was then followed downward by careful dissection ligating and cutting anastomosing branches. Nineteen branches were thus divided. The vein was thus followed down to just above the ankle, twenty-eight inches of vein being removed and the incision being twenty-five inches long. The wound healed well and there has been no recurrence of ulcer since. The writer, very properly, remarks that no other method of radical cure can compare in point of efficiency and safety, if only it is done with proper precautions, with the resection of the veins. By this method you have left a surgical wound which heals promptly and not as by some of the other methods a thrombus in a diseased vessel which must require a long period for its absorption and organization and is furthermore a first rate site for the development of suppuration.

Danger of Ergot After Parturition.—Mme. Gaches-Sarraute (*La Semaine Medicale*), in a paper before the French Academy for the Advancement of Science, stated that she would supplement the old rule that ergot should not be given before the child and after birth had been expelled, by an additional one that ergot should not be given at all. Not even in those cases complicated by severe hæmorrhage. The foundation for these views lies, she thinks, in the fact that the uterus is never completely emptied in parturition—there always remain some shreds of membrane or clots. These, according to her view, are a very grave source of infection, and a frequent cause for subinvolution and late infection recognized clinically in the several forms of metritis. Her own practice is to completely empty the uterus in all cases, and to be sure that this has been done she carries the hand into the uterus. The writer recognizes the danger of this practice as ordinarily performed, but says that with a thoroughly aseptic hand, with the nails carefully trimmed to avoid wounding the uterine tissue, it is attended with little risk. On the contrary, if the uterus is thoroughly emptied and washed out with sterilized water, hæmorrhage is immediately arrested and involution is a rapid process occupying but a few days.

She claims for these apparently heroic measures, almost complete freedom from the secondary accidents now, unfortunately, too common.—*Jour. Am. Med. Ass'n.*

Tape Worm.—Says the *Times and Reg.*: Campi's treatment for tape worm is as follows: Give over night five or six fluid drachms of castor oil. Next morning give early two drachms of thymol divided into twelve doses, one to be taken every fifteen minutes. After taking it the worm will be expelled entire.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., Editor. W. C. MARDORF, M.D., Associate Editor.

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The Treatment of Abscess of the Antrum of Highmore.

The various methods of treatment adopted in treating abscess of the antrum of Highmore have not hitherto been attended with at all uniform or satisfactory results. Dr. Alfred Friedlander (*Berl. Klin. Woch.—Deut. Med. Zeit.*) has made a study of the cases occurring at Prof. Krause's clinic, and states that the method recommended by Hartmann, of washing out the antrum through its orifice in the nose, which was employed for some time, did not give any permanent results. According to this an artificial opening would seem to be necessary. The author describes the operations employed by Desault, Kuster, and Mikulicz, detailing their disadvantages, and comes lastly to the method described by Prof. Krause, in 1887, which is very easy of performance, and consists simply in perforating the wall with a trocar. Krause was at first in the habit of washing out the cavity through this opening by way of after-treatment, but further observations showed him that this frequent irrigation lead to satisfactory results only in the freshest and most favorable cases. For this reason the treatment has of late been modified, in that a dry treatment has replaced the frequent irrigations. The cavity is thoroughly cleansed by a single, free irrigation, after which the mucous membrane is treated with either iodoform or iodol. In the treatment of such cavities iodoform especially commends itself, since it is well adapted to lessen and stop suppuration, and to subdue the fœtor which is apt to exist where pus has been long in contact with exposed mucous membrane. The plan pursued is as follows: After cocainization of the nasal mucous membrane a trocar and canula is passed into the nose with the aid of a speculum, and its point is

pressed backward along the outer wall of the inferior meatus until the thinest portion of the wall is reached, which will be manifested by lessened resistance; the trocar is then forced through. That this is practicable has been shown by repeated trials. When the instrument has penetrated the cavity to the depth of half an inch the trocar is withdrawn, and a rubber tube attached to the canula, by means of which the antrum is thoroughly washed out with a warm boric acid solution, the pus and fluid escaping through the natural opening into the nose. When the outflow of water is clear air is pumped into the antrum to free it from moisture, after which the rubber tube is removed and a powder blower attached, filled with iodoform. This is puffed in until there is reason to believe that the mucous membrane of the antrum is well covered with it. (Though the fact is not definitely stated, it is probable that the trocar and canula used are curved at the end.) Usually the flow of pus into the middle meatus ceases on the first day, in which case the irrigation is not repeated; instead of this iodoform is applied every two days, by reintroducing the canula. To do this, it is necessary to use cocaine each time. If, however, the flow of pus does not cease, renewed irrigation is necessary. By the use of this method it was possible to permanently cure several cases within fourteen days. The author finally gives a detailed history of nine cases in which this method was employed.

The Management of Lingering Labor.

At the last meeting of the British Medical Association there was a discussion on the modern methods of managing lingering labor, which was opened by the well-known obstetrician, W. S. Playfair, M.D. The subject is one of considerable importance, and a brief abstract of his views as thus presented will be of value. He began by contrasting the methods of the present day with those in vogue thirty years ago; at that time the patient was allowed to undergo much suffering that could have been easily prevented, but now the tendency is possibly to err in the opposite direction. He then refers to the prolongation of labor in the first stage by a rigid and undilated os. The wear and tear of a labor lasting more than a day is a serious thing, and should be avoided, even if there be no real mischief. Rigidity of the os may be due to cicatrices, inflammatory or malignant indurations, etc., all of which are extremely rare, or it may be due, as it more usually is, to one of the following causes: inertia, irregular and cramplike pains, premature rupture of the membranes, adhesions of the membranes, and over-distension of the uterus from excess of amnionic fluid. In such cases the relief of acute pain, the calming of excitement, the lessening of spasmodic contractions, and the relaxation of tissue are all promoted by anæsthetic drugs, of which chloral is the one to be preferred. Chloroform is out of place in the first stage. Under the use of chloral the pains become longer, steadier, and more efficient, the patient dozes off between the pains, and the wild excitement of this stage, which is so frequent, is calmed. A dose of fifteen grains, given either by the mouth or rectum, and repeated in twenty minutes, produces an effect lasting over several hours. A third dose is sometimes required, but not often. Since using chloral in this way he has never had occasion to give opiates, which he believes have a tendency to arrest uterine action instead of strengthening it. Quinine given in one or two doses of fifteen grains each, where the pains are feeble and ineffective, often strengthens and alters their character; it does not appear to possess the dangerous properties of ergot. Among mechanical means, separation of the membranes by sweeping the finger around the inner surface of the os uteri promotes dilatation remarkably. Dilatation by means of rubber bags may sometimes, but not often, be of service.

Another variety of prolonged labor is that from want of expulsive pains, the head being in the pelvis. Here ergot has justly gone out of use. Uterine expression is a most valuable resource, which has not hitherto been sufficiently appreciated. The best way of using it is for the practitioner to stand by the side of the patient, and to spread his left hand over the fundus; when the pain comes on strong downward pressure is made in the direction of the axis of the brim. If the right index finger be placed on the head in the vagina at the same time, it will be felt to be pushed down in a marked way. In this manner the head can often be pushed through the brim and right on to the perineum in two or three pains. This method has none of the disadvantages of ergot, the effects of which when once given are entirely beyond our control. Used with due care, it does not seem to have any kind of injurious effect, and is, in fact, merely a means of supplementing deficient uterine contractions. The expedient is of course only applicable in the second stage, after the rupture of the membranes, and when it is known that the pelvis is of full size, and there is no resistance from the soft parts. In the discussion which followed, a number of valuable suggestions were made. For a rigid cervix the following were advanced: Tincture of gelsemium instead of chloral, given in five to ten-drop doses and repeated in twenty minutes; the use of the hot vaginal douche; cocaine locally to the cervix; the introduction of a bougie between the membranes, followed by douches; the application to the os of a small quantity of extrac of belladonna, as practiced by Polish midwives.

Where the labor was delayed in the second stage it was important to diagnose the position of the head; a case of lingering labor would often be speedily terminated by altering the position of the head with forceps from the third or fourth to the first or second. After this the natural powers would need little or no assistance. Altering the position of the woman was thought to be a good plan. Some preferred friction of the abdomen instead of mere pressure, as recommended by Dr. Playfair. One physician advocated firm and regu-

lar bandaging during the second stage. Another said there were two indications in delayed labor in the second stage. The first was to strengthen the contractions, which could be done by friction over the uterus, galvanism, and the use of ergot in full and effective doses. The second was the use of forceps. A gentleman present stated that the use of strychnine in small doses, repeated three times daily for two or three weeks preceding confinement, in his experience has a most wonderful effect in promoting uterine action and expediting labor. Opinions were divided as to the use of opium in the second stage, but the majority seemed to favor its careful use. It was considered that the forceps were used oftener than indications warranted, sometimes in one out of every four or five cases. The points to be considered were the safety and comfort of the patient rather than the convenience of the practitioner.

A New Method of Percussion.

Dr. Kabierske, of Breslau, who fully recognizes the value of mediate percussion (by means of the plessimeter), has been studying the matter of immediate percussion, because it seems to him easier and more convenient, with a view to avoiding the numerous difficulties which attend the present method (*Ther. Monatsh.—Med. Chir. Rund.*) For this purpose he has devised an instrument similar to a tuning-fork, with the handle cylindrical and covered with rubber, and the blades rounded off at the ends. The handle of the instrument is held between the forefinger and thumb, and raised and lowered by them without moving the hand. Percussion is thus rendered easier of performance, because only one hand is required; the results are also said to be more accurate, since among other advantages, much smaller surfaces can be examined at a time, the thickness of the blades being but 7 mm. (about ¼ in.); thus this might almost be called punctate percussion. The author has preferred his percussor above all other means in examining the apices of the lungs, assuming, (perhaps not with justice), that no investigations into the movability of this portion of the lungs have yet been made. At any rate it is worthy of notice, that Kabierske can, with this instrument and after sufficient practice, easily detect apical dulness which would be sought for in vain by ordinary methods of percussion. A further advantage of the instrument is that it will serve as an aid to the sense of touch, especially in percussing out the heart, the area of which the author was able to outline in a way different from that previously employed. By laying the handle flat on the surface, the instrument makes a good plessimeter, especially in abdominal percussion, and has more than ordinary value in the percussion of small areas, since it covers less service than the implements heretofore in use, and the sound it gives is loud and clear. Its weight is 15 grams (½ ounce). Although the sound given out by this instrument when used as a plessimeter is less than that made by the ordinary plessimeter, it is still loud enough for all purposes.

MEDICAL ITEMS.

Strychnia as a "Vaccine" Against Tetanus.—M. Peyraud, of Libourne, France, announces, that he has successfully "vaccinated" rabbits against tetanus by injections of minute quantities of strychnia.—*Med. Rec.*

Aristol and Collodion.—An exchange suggests the following as a good formula for aristol and collodion:

℞	Aristol,	ʒ j.
	Ether,	f ʒ i ℈ j.
	Collodion,	f ℥ j.

Camphorated Naphthalin has been recommended by L. Keutmann, says the *Med. Rec.*, the camphor concealing the disagreeable naphthalin odor. It is prepared by melting together the two ingredients in the proportion of one of camphor to four of naphthalin.

What Was in the Water.—After some 40 years of immersion in the waters of the pool of Echoschacht, not far from Hermannstadt, several human bodies have been brought to the surface in a state of perfect preservation. The composition of the water is not stated.

Salol Collodion.—It is recommended in the *Repertoire de Pharmacie* for July 10, 1890, to dissolve 4 parts of salol in 4 parts of ether, and then add to 30 parts of collodion, and it is stated that the application of the salol collodion to the affected parts in acute rheumatism will be followed by rapid relief of pain.—*Ther. Gazette.*

Posthumous Labor.—The newspapers reported from Vienna on September 19, that the body of a woman named Goeda was exhumed at Szegedin that day for the purpose of an autopsy. When the coffin was opened it was found that the woman had been buried alive and that she had given birth to a child in the coffin.

Confirmation Strong as Holy Writ.—We have lately had it directly from an enthusiastic advocate of the "Wilford Hall Method" that the whole "discovery" consists in the use of water *per rectum*—variations being rung in as to the quantity and the time for the use of the injection, to make it look more like a 'discovery' or 'system.'

A Solution for Nasal Catarrh.—

℞	Ammon. Muriatis,	30.0 (ʒj.)
	Sodii Chloratis,	75.0 (℥ijss.)

M. D. S.: A teaspoonful to a glass of water to be used twice daily as a nasal douche in post-nasal catarrh combined with deafness. According to *L'Union Medicale*, this solution is much used in the London hospitals.

TANNIN IN BURNS.—Mikalsky, in *Revue de Ther.*, recommends tannin in superficial burns, as follows:

℞ Tannin,
Alcohol, - - - - - - aa ʒj.
Etheris sulph., - - - - - ℥j.

A similar preparation has been used in this country with much success.

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TAMPERING WITH A PRESCRIPTION.—A chemist at Grenoble was recently sent to prison and fined 500 francs, besides having to pay the costs of the action, for having substituted naphthaline for naphthol-beta in a prescription for a patient suffering from typhoid fever. The patient, after taking each dose, complained of an abominable taste of coal-gas in his mouth and was seized with severe vomiting.

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HOT SPRINGS, ARKANSAS.—This famous pleasure resort and sanitarium will commence the season of 1890 with more complete hotels and bathing facilities than ever before. It is growing in popularity every year, and round trip tickets are on sale by all lines in connection with the Iron Mountain Route during the entire year at greatly reduced rates. Ticket offices 102 N. 4th St., and Union Depot.

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RUBEOLA IN ADULTS.—The *N. W. Lancet* states that according to the *Deut. Med. Zeit.*, Dr. Leopold Gluck, Zenica, says the opinion generally entertained that rubeola is severe in the adult, is not supported by his experience. He had opportunity to observe 33 cases amongst adults, of whom 6 were convicts, and none of the patients died, nor were there any symptoms indicating a specially dangerous character in the disease.

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IMMIGRANTS TO BE EXAMINED.—It is reported that the United States Marine Hospital Service will recommend the plan of having a systematic examination of all persons intending to immigrate to this country. This examination would be made by physicians attached to the United States consulates. It is to be hoped that some such measure may be attempted. It is cheaper to keep out the sick, criminal and defective classes, including anarchists, than to support them here or send them back.

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TRICHINOUS HAM.—Dr. Gules Rochard urges that the law forbidding the importation of American ham and bacon in France should be repealed. Trichinous ham, he asserts, is harmless when cooked. The prohibitory decree withdraws 400,000,000 kilogrammes of meat from the market; this loss most closely affects the poor and the working classes. The Comite Consultatif d'Hygiene Publique was consulted by the Minister of the Interior, and replied that trichinous ham when cooked was harmless.

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ARTIFICIAL MUSK.—A German chemist named Bauer, has discovered and patented a process for making a laboratory musk. The new product is not identical in chemical composition, with the natural article, but it is possessed of the characteristic odor. The process of its formation is said to be by means of the nitration of isobutyltolnene with a mixture of strongest nitric and fuming sulphuric acids. The manufacture of this substance has been begun on a considerable scale. It is said not to be poisonous.

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DR. ROBERTS BARTHOLOW, the author of the famed work on Materia Medica and Therapeutics, is said to be laboring under the delusions that he is under the surveillance of the police, and that his wife's affections have been alienated from him. He has been requested to resign his chair in the Jefferson Medical College, Philadelphia.

The most prominent candidates to succeed him are, Drs. Solis-Cohen, James C. Wilson, Henry Morris, T. J. Mays, and Samuel Potter, of San Francisco.

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ENLARGED TONSILS AND NOCTURNAL INCONTINENCE OF URINE.—Dr. Korner, of Frankfurt, says (*Munch. Med. Woch.*) that he has frequently observed enuresis nocturna in hypertrophy of the tonsils. In two cases he effected a cure by removing the tonsils. The hindrance to nasal respiration is not the only cause in such cases; the enuresis is rather to be attributed to the uneasy sleep thus produced. Korner believes the theory is far-fetched, which regards the enuresis as a symptom of beginning carbonic acid intoxication, resulting from an insufficient supply of air.

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THE MORTALITY OF WIDOWERS FROM PHTHISIS.—"In a paper on Tuberculosis in Belgium MM. Destree and Gallmaerts come to the conclusion as the result of their investigations that, in comparing the mortality from phthisis of bachelors, married men, and widowers, the last are very much more subject to this disease than either of the other classes. The same statement holds good for all ages, and it is, they say, also true that widows are more liable than single women to die of phthisis. The authors do not think this is to be explained except by direct contagion of wife to husband or husband to wife. They can not think irregularities and excesses indulged in by widowers can be answerable for it, for advanced age does not seem to make any difference. They would ascribe it to infection occurring during married life, the disease claiming its second victim some time after the death of the first."—*Lancet.*

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A CAISSON-DISEASE HOSPITAL.—The *Br. Med. Jour.* quotes from an engineering periodical a description of a compressed-air chamber, or cylinder, for the reception of workers in tunnels and others who suffer from caisson-disease. Mr. Moir, the engineer in charge of the Hudson River tunnel work, has devised for his men, several of whom have been severely affected, a "hospital" for caisson-cases. This so-called hospital is a steel-

plate cylinder, 18 feet long by 6 feet in diameter, and is divided into two compartments, one of which is an air-lock. Both chambers have been fitted up with beds and everything necessary for the comfort of the patients. The air-pressure is maintained by a pump, so arranged that it will furnish a constant supply of fresh air. The degree of pressure is not kept very high, seldom, if ever, exceeding 30 pounds to the square inch. This degree of compression promptly retards the progress of the trouble, if the early symptoms receive attention.—*Med. News.*

PUBLICATION OF KOCH'S INOCULATION METHOD.—The following, cabled to the *Republic*, is given for what it is worth:

"Berlin, Nov. 11.—In accordance with his statement that he desires neither material advantage nor pecuniary reward for his discovery of a method for the cure of consumption, Prof. Koch will in two or three days publish a full account of his researches in connection with the discovery.

The Frankfort *Zeitung* affirms that the lymph used for inoculating the patients will be within the reach of all and that it will cost only 25 marks for a small phial. The success of the treatment is certain in tubercular affections of the skin, joints and bones and also in the early stages of pulmonary complaints. The lymph destroys the tubercular bacilli. Several authorities confirm the report of the cure by Dr. Koch's method of a case of lupus on the face and arms within five days. The lymph throws off the bacilli by the necrotic process. Inoculation with the lymph is ineffectual in syphilitic affections.

The Emperor has summoned Prof. Koch to a personal interview, desiring to learn the details of the results obtained by consumptives with the treatment found by the professor. It is stated that the treatment has been proven efficacious beyond question. The Emperor has made a gift of $250,000 to Prof. Koch and has given another $250,000 to endow a national institute at which the lymph used in the treatment will be produced. The lymph is described as a transparent yellowish fluid, having a slight smell of carbolic acid. The patient who was cured of lupus was a girl æt. 16 years. The doctors who knew of the case were deeply interested in the wonderful and speedy results of the treatment."

CORRESPONDENCE.

MISSOURI VALLEY MEDICAL SOCIETY.

COUNCIL BLUFFS, IOWA, Nov. 1, 1890.

EDITOR REVIEW.—The next meeting of the Medical Society of the Missouri Valley will convene at Kansas City, Mo., December 18, at 10 A.M. An interesting programme is promised. This meeting will be well worth attending. Two hundred and thirty members are now on our rolls and large additions promised at this meeting. The society is destined to become the best in the West. Programme and arrangements regarding transportation will be sent prior to the meeting. Titles of papers must be sent the Secretary before November 20, for a place on programme.

F. S. THOMAS, Secretary.

SELECTIONS.

HOT WATER IN ACNE OF THE FACE.

Hot water applied twice or three times a day for about five minutes is one of the most reliable local remedies which we possess for the treatment of acne of the face. To derive the full benefit from the effects of this simple remedy it is necessary that the physician, and through him the patient, should be thoroughly familiar with the proper method of using it. The water should be very hot, so hot, in fact, that it can hardly be borne by the patient. Care should, of course, be taken not to scald the face, but if the water is warm only, instead of really hot, more harm than good will be produced. The face should not be washed, rubbed, or bathed with the hot water, as is so frequently done, but a small portion of the diseased area of the face should be soaked with it for a very short time only. The heat of the water, which is brought in contact with the skin, is deeply dissipated for a moment and causes an intense but transitory local hyperæmia. This is exactly what we want to produce. If the hot water is allowed to act on the skin for too long a time, say more than a minute, or if the application is renewed at too short intervals, an acute inflammatory condition is added to the disease already existing. It is sufficient to go over the affected parts twice in one sitting, and the entire operation need not take more than three to five minutes. A handkerchief or a piece of soft linen is commonly used to convey the hot water to the face. I use for this purpose a very simple glass holder, which I have constructed. Since this little instrument, which I have named "Thermophor," has proved itself very useful and convenient, I shall take the liberty of shortly describing it here. The instrument consists of handle and head. The latter is nothing else but an ordinary short test tube. About half of this tube is filled with cold water. A thick pad of absorbent cotton is tightly stuffed into the opening of the tube. The holder is then reversed, and the water inside the tube allowed to soak the cotton. The latter is thus kept in place by dint of the weight and adhesion of the water. During these few preparatory steps water has been brought to the boiling-point in a small vessels on a stove or over a gas or alcohol lamp. The holder with cotton is dipped into the hot water, left in it for a few minutes, and then carefully carried to the affected portion of the face. The advantages of the "thermophor" are manifold. It saves the patient's hands from coming in contact with the hot water; it renders possible the use of water of very high tempera-

ture, and makes it easy to confine the action of the heat to a limited portion of the diseased area. Besides, it is clean, handy and cheap. Not only plain, but also medicated hot water may be used in the manner as described above. Hot solutions of boric acid, bicarbonate of soda, salicylic acid, resorcin, etc., are all very serviceable. I have had excellent results from the so-called "lotio alba," to which resorcin is added according to the following formula:

℞ Zinc. sulf.
Potass. sulfuret, - - - aa ʒj.
Aq. rosar. - - ℥iv.
Dissolve each of the ingredients in half the water, misce et adde resorcin, ʒj.
S. Lotion. Shake well.

This lotion is to be used hot at night and cold in the morning.—Frederick J. Leviseur, in *N. Y. Med. Rec.—N. Y. Med. Abstract.*

Treatment of Obesity.—Prof. H. Kisch (*Boston Med. and Surg. Jour.*) says:

1. The avoidance of superfluity in the ingestion of food—it is desirable that there should be a decrease of quantity to an amount smaller than what the patient was accustomed to, but yet inside the lines within which the body can be sustained. In plethoric individuals, 160 grammes albumen are given, 10 grammes fat, and 8 grammes carbo-hydrates; and in anæmic patients, 200 grammes albumen, 12 grammes fat, and 100 grammes carbo-hydrates. There may be three or four meals daily at fixed hours, but nothing in the intervals.

2. As to the quality, the principal point is a full proteid meal, corresponding to the nutrition and condition of life of the individual, and having regard to his age, stature, occupation, and habit, with a moderate amount of carbo-hydrates, and the fat reduced to a minimum.

3. Ingestion of fluid is not limited; particular drinks are allowed according to need, only during meal times little or nothing ought to be drank. To lessen thirst and encourage diuresis, the use of alkaline carbonate waters is advised. Anæmic patients should drink less water than plethoric people, and the same remark applies to those with cardiac insufficiency.

4. Bodily movements must be methodically carried out—for example, exercises, walking, mountain climbing—with particular care as to the existence of fatty heart. By these means the mental condition may be improved.

5. Sleep should be curtailed to six or seven hours by night, and sleeping by day, especially after meals, forbidden.

6. Stimulation of tissue-change is secured by a bath of average temperature and cold rubbing; where there is no vascular disease, vapor baths followed by cold friction may be permitted. The bowels should move regularly and in sufficient quantity daily.

The following diet table is carried out at Marienbad by Prof. Kisch's patients: In early morning, 5 to 6 o'clock, three to four glasses of Marienbad water; then a walk through the wood for one or two hours; after which breakfast—cup of tea or coffee with one tablespoonful of milk, without sugar, some biscuit, a little cold lean meat (roast beef or veal) or ham deprived of fat; no butter. Between 10 and 11 A.M., a Marienspring bath, with the addition of soda, for fifteen minutes, after which cold rain douche; then an hour's walk and one glass of Wald spring with lemon-juice. Where the heart is intact and powerful, and no arterio-sclerosis, a vapor bath, with a cold rub down following, may be allowed twice a week. Dinner between one and two—no soup, or one of thin, not fat, beef juice without addition of barley, sago, bread, etc.; roast lean meat, beef, veal, food without sauce, having vegetables, spinach, cabbage, cauliflower, bread crust; and for dessert, a little fresh fruit. Forbidden are goose, duck, pork, carp, salmon, herring, puddings, potatoes, butter, cheese, sweet preserves, cream and ices. As a drink, one wine-glassful of good light wine may be given, the best time being an hour after meals; no beer, no champagne, no liquor. Walking exercise for three hours; then one cup of coffee or tea without sugar or milk; about 6 P.M. a glass of Marienbad water. Supper about 7 or 8 o'clock—100 to 200 grammes of roast meat, cold roast, or lean ham, and a little bread crust. A walk for one hour after. Before bed-time, cold sponging of the body.—*Am. Lancet.*

Dietetic Rules in Diseases of the Digestive Organs.—Dr. J. Boas (*Deutsche Med. Zeit.*, No. 43, 1890) deals generally with the dieting of stomach and intestinal disorders. In considering diet in such conditions, three points must be looked to: (1) the constitutional condition and the state of nutrition of the patient; (2) the surroundings and customary habits of the patient. Thus, the dietetic treatment of the workman must be considered from another standpoint than that of the well-to-do. Thirdly, the most important point is the prescription of diet with the actual disturbance of digestion in view. The stomach, for example, gets out of order in two of its functions—the motor and the chemical; absorption in the stomach plays a very small part in the functions of the organ, so that an endeavor must be made (by the use of the stomach sound) to discover (1) whether there is a disturbance of the gland function, and whether there are fermentative processes going on; (2) whether the motor activity of the stomach is at fault; or(3) whether both these conditions are present. There are cases, for example, in which the stomach seems incapable, owing to deficiency of gastric juice, of digesting proteids; in these cases the digestion of carbohydrates may be perfect. Proteids in these cases must, therefore, be given in a prepared or semidigested form (albumen, peptone). In these cases fat is digested with difficulty, or, rather, is split up into fatty acids by the fermentation in the duodenum, and so does not enter the lymph channels in the usual form of an

emulsion of neutral fat. Sodium chloride is useful in these cases, since it helps to form the hydrochloric acid of the stomach, which tends to stop fermentative processes. On the other hand, there are cases where there is hyperacidity in the stomach. In these cases proteids are exceedingly well digested and carbohydrates but feebly acted upon, so that the digested forms, such as dextrines, malted foods, etc., have to be prescribed. For insufficiency of the motor activity of the stomach, enemata of half a litre, with a proper diet, are beneficial.—*Br. Med. Jour.*

THE INFLUENCE OF CLIMATE IN THE UNITED STATES OVER BRIGHT'S DISEASE.—A review of his investigations substantiates the following conclusions:

1. That the chief features of climate in the United States which most strongly tend to increase the death-rate from Bright's disease are cold, moisture, and changeability of temperature.

2. That the elements of climate which tend in the greatest degree to decrease the death-rate from Bright's disease are warmth, dryness, and equability.

3. That cold most markedly increases the mortality from Bright's disease when associated with moisture, a comparatively low temperature being well borne if the atmosphere is a dry one.

4. That a comparatively high degree of humidity of the atmosphere does not markedly increase the mortality from Bright's disease if accompanied by warmth and equability.

5. That the most unfavorable residence localites for patients afflicted with Bright's disease in the United States are comprised within the Atlantic coast region and Northeastern hills, which include the States of New Jersey, New York, Connecticut, Massachusetts, New Hampshire, and Vermont.

6. That the most favorable residence localities are chiefly comprised within the Southern interior, and especially include the States of Tennessee, Georgia, North Carolina, Arkansas, and Texas.

7. Finnally, a practical lesson may be learned from these investigations as follows: That, since climate so decidedly influence the mortality from Bright's disease, those who are afflicted with the disease or possess strong hereditary or other tendencies thereto should wear such garments as most directly tend to neutralize the evil influences of climate over the disease—viz., those combining the minimum power of radiation of body heat with the highest hygroscopic properties; and since wool possesses these qtalities to a degree unapproached by any other textile, all-wool garments should be worn next the skin throughout the year.—Dr. Burdy, in *N. Y. Med. Jour.*

INEBRIETY AND MARRIAGE.—Dr. T. D. Crothers, in an editorial in the *Quarterly Journal of Inebriety*, says: Public sentiment is shocked at the marriage of lunatics, and yet every day the lunatic inebriate is permitted to marry, and persons are ready to join themselves in such a contract for the purpose of curing them. In a recent murder case it appeared from the evidence that the murderer's father was married when intoxicated, and died a few years after the suicide. The murderer was the first child, and was a low, paroxysmal drunkard, who had spent years in prison for crimes of drunken violence, and finally killed a passing stranger. In another case the courts refused to grant a woman a divorce who had recently married and found her husband an inebriate; a few months later this husband killed her in a drunken frenzy. In a certain family of entailed wealth there are living to-day, in the third generation, ten direct descendants who are feeble-minded, idiotic, and insane; all clearly traceable to the marriage of an inebriate ancestor. The failure of the law to prevent and regulate such marriages, and the delusion that inebriety is a *vice* that is under the control of the victim, is one of the great obstacles toward social and legal reform. The efforts to raise the poor and degenerate inebriate and his family are practically of no value as long as marriage with inebriates is permitted. Recently the legislature of the State of Victoria in Australia has passed a law which gives a wife the right of divorce if the husband is found to be an habitual drunkard. If after marriage she discovers that he is an inbriate she can also get a divorce. The husband can do the same with a wife if she is proven to be an inebriate. This is a clear anticipation of the higher sentiment which demands relief from the barbarous law which would hold marriage with an inebriate as fixed and permanent.—*Am. Pract. and News.*

THE PREVENTION AND TREATMENT OF TYPHOID FEVER.—

1. There is no medical treatment for an uncomplicated case of typhoid fever.

2. Diet and stimulants carefully regulated to suit the case, and good nursing, fulfill all the indications.

3. The fever is best controlled by frequent sponge baths of tepid water and alcohol, and the internal use of stimulants and opium.

4. Feeble heart and prostration from hæmorrhage or diarrhœa are relieved by opium, stimulants, belladonna, and oxygen gas.

5. Pneumonitis and bronchitis are not influenced by special medication. Food and stimulants, with opium to relieve cough and pain, and quinine in tonic doses may be given.

6. Hæmorrhage of the bowels requires the free internal use of opium only.

7. Perforation of the bowels is only successfully treated by the use of opium.

8. Peritonitis requires the use of opium in repeated doses.

9. Tympanites is most successfully relieved by the

use of opium internally three or four times daily, with turpentine applied to the abdomen.

10. Diarrhœa is controlled by opium and the regulation of food.

11. Insomnia yields best to the use of opium; where this drug is not well borne codeine, paraldehyde, or urethan may be given.

12. Nephritis should be poulticed locally and opium given internally to relieve pain.

13. Constipation is best releved by mild laxatives and enemata.

Retention of urine requires the use of the catheter only.—J. W. Irwin, in *Amer. Pract. and News.*

Calomel as a Diuretic.—Dr. E. Jendrassik (*Pesth. Med.-Chir. Presse,* Nos. 7 and 14, 1890) in his latest observations on the action of calomel in heart disease concludes that its employment is only indicated when other remedies (especially those acting directly on the heart) have lost their effect. The condition of the heart has no appreciable effect on the polyuria produced by calomel. Frankel considers that the drug acts best when the pulse tension is low, Brauner when the dropsy is the result of a weakened heart or of degeneration of the cardiac muscle. With both these ideas Jendrassik disagrees. Cases are quoted by him showing the value of the drug in "desperate" conditions of heart disease, where, for example, tincture of strophanthus had signally failed. The dosage is an important point. Within the 24 hours 8 to 10 doses of one grain and a half (0.1 gramme) of calomel may be given, and the treatment must not be continued for longer than two days. After one day's treatment as much as from 4 to 7 litres of urine have been passed, accompanied by the passage of lung casts for a short time. Such a dosage obviates the occurrence of stomatitis; if this occurs the best mouth wash is a 2 to 3% solution of sodium carbonate. In two cases death occurred during the calomel treatment, but this result was due to the patients taking too much of drug; they found it of benefit and went on taking it. Jendrassik therefore advises the treatment to be carried out under strict medical control. In some cases death occurs suddenly, but never during the stage of diuresis.—*Br. Med. Jour.*

Treatment of Bubo.—Dr. L. Brocq, writing in the *Jour. of Cutaneous and Genito-Urinary Diseases,* July, 1890, says that according to Dr. Cordier, of Lyons, the procedure which has given him the best results in the treatment of bubo is as follows: As soon as the œdema of the skin shows the presence of pus, he makes a puncture with a straight bistoury. There is discharged along with the blood some streaks of pus. No pressure is made, but the cavity is injected with about 15 drops of a solution of nitrate of silver (1:50). Without paying any attention to whether the solution flows out again or not, the wound and groin are drsssed with iodoform and a spica bandage is applied. When this slight operation is done soon enough, Dr. Cordier says no purulent discharge follows, and the bubo disappears rapidly, leaving behind a sort of indurated nodule. When the puncture is made in a bubo much more advanced and in full suppuration, the pus must be carefully washed out. A first injection of the solution is made to cleanse the parts, and the second injection is left in. A decided inflammatory reaction is then established and free suppuration occurs, which lasts for 3 or 4 days, and then becomes serous. Healing takes place rapidly, and the opening closes without leaving a cicatrix. Dr. Cordier has had the same results, whether the bubo was specific or simply inflammatory.

The International Congress.—The *Med. Press* gives the following analysis of the Berlin Medical Congress: Seven thousand and fifty-six member cards were sold; 5,561 were visiting medicals; 116 were contributors of papers, etc., in the meeting; 1,379 were ladies' cards. Of the 5,556 medical male members, there were from the Provinces of Germany, outside of Berlin alone, 1,157; Austria-Hungary, 257; Great Britain and Ireland, 353; Netherlands, 111; Belgium, 61; Luxemburg, 2; France, 171; Switzerland, 64; Italy, 144; Spain, 40; Portugal, 5; Sweden, 166; Norway, 58; Denmark, 139; Russia, 421; Turkey, 12; Roumania, 32; Bulgaria, 5, Greece, 5; Malta, 2; Monaco, 1; Servia, 2; United States, 623; Canada, 24; Brazil, 12; Chili, 11; Cuba, 4; Trinidad, 1; Mexico, 6; Hayti, 1; other parts of America, 24; Egypt, 8; Cape Colony, 1; other parts of Africa, 5; Chins, 2; Japan, 22; East Indies, 2; India, 2; Australia, 7. Those who came after the first day are not included in the above.

Phenacetine in Gonorrhœal Rheumatism.—In gonorrhœal rheumatism, Rifat concludes, from an observation of three aggravated cases, that, in cases where salicylate of sodium has completely failed, phenacetine may have a real curative action. This disease is often most intractable, being the opprobrium and despair of the physician; though its pathogeny is doubtless widely different from that of acute rheumatism, yet, in the cases reported by Rifat, phenacetin gradually pushed to six and eight grammes a day (certain auxillary local measures,as compression,being also employed) gave most satisfactory results, the pain and swelling rapidly subsiding, sleep and the power of movement returning. Unfortunately, three cases is too small a number to warrant a definite conclusion.—*Boston Med. and Surg. Jour.*

Perchloride of Iron for Leucorrhœa.—Of all remedies for simple leucorrhœa, the old tincture of perchloride of iron is the best, combined with hyoscya-

mus, opium, hop, or Indian hemp, when the mucous membrane is in a state of irritation. Tepid or cold water injections, cold hip-baths, etc., are useful local applications, with rest; and avoidance of occupations involving prolonged standing or pedal exercise.

Sometimes tannin, zinc, or alum are valuable additions to the injections. When the discharge emanates from the glands of the os uteri, local applications of belladonna and bicarbonate of potash are serviceable, two ounces of tincture and a teaspoonful of the alkali to about a pint of water.—*Archives f. Gyn.*

Unna's Treatment of Ulcer of the Leg.—Dr. Hillebrand, of Cologne, has obtained excellent results with Unna's treatment. This consists in thorough cleansing of the leg with soap and water and application in a thick layer of the following paste to the parts, excepting the site of the ulcer:

℞ Zinci oxidi,
Gelatin puris, - - aa 10.00
Glycerini,
Aqu. destillat, - - aa 40.00

The ulcer is then sprinkled with iodoform, and covered with a layer of cotton and sublimate or iodoform gauze. Over this is applied tightly a double-headed wet mull bandage, the ends crossing in front of the leg. The bandage should extend at least from the middle of the foot to the calf, and is supplemented by a second one similarly applied. The dressings are changed in from two to four or even eight days, according to the amount of discharge. The effect of this method of treatment is to stretch the healthy skin over the ulcerated surface, the integument being prevented from retracting by the application of the paste. The free escape of cutaneous secretions is not prevented by the paste as in the case of the adhesive plaster treatment. Hillebrand has obtained a complete cure in twenty-five cases where he employed this method. In all of them there was a rapid improvement in the local and general conditions, and the patients were able to work after application of the dressings. Equally good results were obtained in a case of chronic ulcer of the arm.—*Medicinische Monatsschrift.—Int. Jour. Surg.*

Injections of Blood for Chlorosis.—Dr. Antiq, of Lyons, in a recent thesis, recommends injections of defibrinated beef-blood as a remedy for chlorosis. The fluid should be taken from animals known to be healthy. After being whipped once, it is put up in bottles holding half a litre each, a quantity sufficient for four injections, 125 grammes being administered night and morning. The bottles must be kept in a cool place, and heated on a bain-marie before using. The patient should be directed to retain the injections as long as possible. Sometimes they produce slight colic, in which case they must be preceded by a purgative enema, or if this is ineffectual, three or four drops of laudanum may be added to the blood.—*New York Med. Times.*

Administration of Chloralamid.—Much depends upon the proper administration of the new hypnotic, chloralamid, to obtain the full effect and satisfactory and beneficial results. The dose is from 15 to 60 grains, with an average dose of 30 grains. Chloralamid is soluble in about 20 parts of cold water, and in 1½ parts of alcohol.

An additional caution is necessary: Never dissolve or dispense chloralamid in hot water or warm solutions, as the heated preparation decomposes.

The modes of administration are:

1. In a tablespoonful of whiskey or brandy.
2. In properly proportioned solutions with wine, spirits, or spirituous compounds.
3. In a small cup of cold water or cold tea.
4. In powder form, in wafers or cachets washed down with cold water.—*Times and Reg.*

Turpentine in Typhoid Fever.—Dr. H. C. Wood advises a return of the turpentine treatment of typhoid fever as practiced by Dr. G. B. Wood. He begins its use about the twelfth or the fifteenth day, thinks it lessens the tendency to hæmorrhage, and ameliorates other symptoms due to the local lesions.

His formula is:

℞ Oil of cloves, - - - gtt. vj.
Oil of turpentine, - - - f ʒ jss.
Glycerine,
Mucil. of acacia, - - - aa f ℥ ss.
Syrup,
Water, - - - aa q. s. ad f ℥ iij. M.

Sig.: Dessertspoonful every three hours during the day.—*Med. News.*

It was at a dinner in Chicago. The invited ministers were deploring the fact that the catechism is but little studied by the children of the present day. In this the hostess differed from them, saying:

"It is not so in our house. James has just received a prize for a perfect recitation of the catechism, and even little Johnny is beginning to learn it. Johnny, tell the minister 'What is the chief end of man?' "

The little fellow addressed had been too intent on an unusually good dinner to hear aught but the question directly addressed to him, and was, perhaps a little annoyed at the interruption, for he replied rather impatiently:

"I don't know, but I suppose the one with the head on!"

Pilocarpine in Belladonna Poisoning.—Dr McGowan (*Lancet*) relates an interesting case of belladonna poisoning, successfully treated by hypodermic injection of two doses of pilocarpine, ½ grain each. He considers that the drug was undoubtedly the means of saving a valuable life.

USEFUL FORMULÆ.

SCABIES.—The London *Med. Rec.* says the following is an efficient application for scabies:

Creolin, - - - - - 1 part.
Balsam of Peru, - - 20 parts.

TYMPANITIS.—The following is recommended (*Rev. Obstet. et Gynœcol.*):

℞ Naphthol,
Mag. carb.,
Carbonis, - - - - - aa ʒ jss.
Ess. Menth. Pip., - - - - - ♏. x.
M. et div. in pulv xij.
Sig.: One every two hours till relief is obtained.—*Can. Lancet.*

LINIMENT FOR RHEUMATISM.—In his small work on rheumatism and gout, Dr. F. Leroy Statterlee recommends the following local application in case of rheumatism:

℞ Ol. gaultheriæ,
Ol. olivæ,
Lin. saponis,
Tr. aconite,
Tr. opii, - - - - - aa ʒ ij.
M. Ft. liniment.
Sig.: Apply freely and cover with cotton batting.—*Can. Lancet.*

NEURALGIC HEADACHE.—Dr. E. P. Hurd, in his monograph on neuralgia, advises the following prescription for headaches of all kinds:

℞ Caffeini citrat.,
Ammonii carb., - - - - aa ℈ j.
Elixir guaranæ, - - - - - ℥ j.—M.
Sig.: ʒ j. every hour until the pain is relieved.—*Can. Lan.*

RIGID PERINEUM IN LABOR.—Dr. E. W. Southworth (*Jour. of Obs.*) uses the following solution in rigid perineum, which he considers indispensable and infallible:

℞ Chloroformi, - - - - - ℥ ij.
Ether sulph., - - - - - ℥ j.
Cologne, - - - - - - O j.—M.
Sig.: Apply locally.

It acts quickly and well, large heads passing the perineum without a tear, which seemed impossible without extensive rupture.—*Can. Lan.*

PRESCRIPTION FOR REMOVAL OF COMEDONES.—McCaskey uses the following application in the treatment of comedones:

℞ Sulphuric ether, - - - - ʒviij.
Ammonium carbonate, - - - - ʒj.
Boric acid, - - - - - grs.xx.
Water, sufficient to make, - - ℥ij.
M.—To be applied locally twice daily.—*Peoria Medical Monthly.*

LUMBRICOID WORMS—GENERAL VERMICIDES.

1. DUPONT'S.

℞ Gourd seed, - - - - - ℥ss.
Sugar, - - - - - - - ʒv.
Milk, - - - - - - ℥ij.
M. Triturate the seed with the sugar, adding a few drops of milk from time to time, until a paste is formed. Add the balance of the milk, rub up well, and filter. Administer the filtrate early in the morning. Two hours later give a dose of castor oil.

2. DUJARDIN BEAUMETZ'.

℞ Tincture of kamala, - - - - ʒjss.
Syrup of orange peel, - - - - ℥ss.
Water, sufficient to make, - - ℥iv.
M. This should be taken in broken doses at frequent intervals until all is taken. If the worm is not expelled within two hours after the last dose, administer castor oil.

3. FOR INFANTS OF THREE OR FOUR YEARS.—

℞ Calomel, - - - - - grs.ijss.
Santonine, - - - - - grs.ij.
Sugar of milk, - - - - grs.xv.
Mix and triturate well together. Give the whole early in the morning, fasting. This is excellent for either lumbricoid or pin worms.—*Med. World.*

ABORTIVE TREATMENT OF HERPES.—M. Leloir employs the following solutions (*Med. News*) in the abortive treatment of herpes:

℞ Resorcine, - - - - - - ʒss.
Cocaine mur., - - gr.viij–xxx.
Ac. tannici., - - - - - ʒjss.
Alcohol (90%), - - - - ℥iij.—M.
Or,
℞ Cocaine mur., - - - - grs.xv.
Ext. cannabis indicæ, - - ʒijss.
Spt. menth. pip., - - - - ʒijss.
Alcohol (90%) - - - - - ℥ij.—M.

FOR DIABETES.—

℞ Fel. bovis inspiss.,
Quiniæ sulph., - - - - aa gr.xl.
Ext. nucis vomicæ, - - - gr. vj.
M.—et in capsul. No. xx divide.
S.: One before each meal.
℞ Ext. hyoscyami fl., - - - - ʒiij.
Ext. damianæ fl., - - - - - ʒvj.
Potassi bicarb., - - - - - gr.xl.
Mucilaginis, - - - - - - ℥ss.
Aquæ, - - - - - - ℥iij.
M.—S.: ʒj every three hours.

Restriction of the quantity of food is more essential than its quality.—Porter, in *Southern Med. Record.*

INK AND RUST STAINS are removed easily by a solution containing ten parts each of tartaric acid, alum, and distilled water. The solution has the trade name of "encrivoir."—*Med. World.*

ORIGINAL ARTICLES.

HYPNOTISM IN SURGERY.

BY EMORY LANPHEAR, KANSAS CITY, MO.

Surgeon to East Side Free Dispensary, Orthopædic Surgeon to University Medical College, etc.

Abstract of a Paper Read Before the Mississippi Valley Medical Association, at Louisville, Ky., Oct. 9, 1890.

Many patients are not fit subjects for the administration of either chloroform or ether, yet are in a condition demanding surgical interference; *e. g.*, a man may have an organic heart lesion, contraindicating the use of chloroform, and a chronic nephritis, forbidding ether, yet a gangrenous hand demanding an amputation. What can be done? It is possible in many instances to make use of hypnotism.

There are two schools of hypnotism: 1. That of Paris, under the leadership of Charcot; 2, that of Nancy, under Liebault. The first maintains that hypnosis is a pathological condition, to be produced only in hysteria or other neurotic disorder, and hence that only one person in a thousand or more can be placed in the hypnotic state. The second teaches that hypnotic sleep is but a physiological condition; *i. e.*, advantage is taken of a peculiar period present in every one when going to sleep, at which time dreams may occur, and when "suggestion" made is fully believed; hence almost any one can be put into the hypnotic state. As a rule, only one in ten cannot be hypnotized, and that is because that particular individual cannot make himself absolutely passive; anyone can hypnotize a person who is willing, but no one save a physician should do so, and he only for therapeutical purposes, because much harm might be done by unprincipled hypnotizeurs. No bad physical effects, however, can result in non-hysterical subjects.

With the first school and its dramatic performances —its so-called "thought-transference," its obtaining of any action by medicines waved through the air at a distance from the patient, its attainment of marvelous hypnotic results from the application of magnets and other procedures that smatter much of the methods of the "mesmeric" shysters of the past—one should have no patience. Indeed the experiments carried on in Charcot's clinic upon neurotic subjects is productive of much harm; many of the phenomena produced are either the result of "suggestion" from the operator, or of deliberate deception on the part of the subject—and being within the realm of the incredible are unfortunate as tending to throw discredit upon a subject of considerable importance to the surgeon as well as to the therapeutist.

What is hynotism? If it be allowable to make a diagram of the four attributes of the mind, an explanation is easy.

Will.	Intellect or Reason.
Emotions.	Perception.

Now in the process of "going to sleep," that is when a person lies down and sinks into a physiological slumber, the first thing to be suspended is the will power; the person wills that he shall sleep, in other words, becomes passive. Next the intellect, or reasoning faculty, becomes quiescent, and there remain awake the emotions and perceptions—if such an expression be permissible. Upon disturbance of perception depend all illusions and hallucinations, whether in sane or insane people. By fear, surprise or even anger, we may have the higher attributes, will and reason, temporarily suspended or "paralyzed," while the emotions and perception have full play; we are all familiar with the complete suspension of the will and of reason in a person "spell-bound with fear," or in surprise. Advantage is taken of this by public operators, as Donato, and other traveling exhibitors, by making some sudden and surprising action by which the subject is thrown off his balance, when instantly the hypnotizeur has control of the emotions and perception. But it is a most unsatisfactory method, and should not be adopted by physicians. Going back to the point where the patient in going to sleep has reached the "half-way line" where the will and reason have already become suspended, if a suggestion be now made the subject will believe it and act upon it, provided the suggestion is made at exactly the right moment.

This is exactly what occurs when a patient is hynotized by the usual method. He is told that he is going to be put to sleep (the word "hypnotism" ought never to be used with the ordinary patient; it is always best to say: "I am going to put you to sleep; make yourself perfectly easy," or something to that effect), and becoming perfectly passive, the will soon sleeps. He is told to think of one thing, or to count, or to look intently at some bright object, and if he can concentrate his mind upon that, reason or intellect also succumbs, and then control is obtained by the proper "suggestion," and any desired effect may be obtained by playing upon the emotions and perception.[1]

All persons are not easily hypnotized; at the first

[1]NOTE.—This explanation of hypnotism may be entirely too metaphysical to suit the materialists of the day. But while we perhaps have distinct "centers" for emotions, will, reason and perception, as we have for speech, motions, etc., yet it is a fact that the mind (whatever that may be) is made up of these four, and that the two superior attributes may become inactive, while the two inferior continue to act.

trial about one in four will be influenced; it is impossible to say if there is any person who can not be put into the hypnotic state by repeated trials—in fact, it is sometimes necessary to make five or six attempts before even a slight effect is produced; but once begun each succeeding seance will give a deeper sleep until at last many, who, at first or second trial, felt nothing, will be completely hypnotized.

The method is as follows: The patient is placed in a comfortable chair, with the head at rest, the eyes turned from the light; he is told that he is to be put to sleep, and instructed to fix his attention upon any one thing, as going to sleep, counting, etc. At the same time he is made to look fixedly at some object, as the bulb of a fever thermometer, held as far above the eyes as necessary to put the muscles of the eye upon a severe strain; every attempt to look at any other object must be promptly checked by the command, "Look at the pencil," the thermometer or other object. Soon the muscles tire, the eyes begin to look red, the lids to tremble or droop a little; just here one may make a suggestion to hasten sleep. As soon as an effect is seen it should be mentioned. The operator now says: "Your eyes are getting red. Your eyelids are drooping—they are getting heavy—so heavy. You are going to sleep—going to sleep—so sleepy now—s-o-o s-l-e-e-p-y," etc.; not by any set formula, but in a soothing yet positive way making the suggestion. The pencil is gradually lowered while this is going on; at this the eyelids naturally droop lower, when the operator again says: "Your eyes are closing; you are going to sleep." The pupils alternately dilate and contract, the patient sighs deeply, and the eyes close. The operator now says: "Now you are asleep—sound asleep—your eyelids are shut—they are very heavy—so heavy you cannot raise them;" and after a number of repetitions until the idea is firmly fixed: "Try it—you cannot raise them—you can't do it—you can't do it!"—this latter very positively. If good judgment has been used as to the time of making this statement the subject will appear to make great effort to open the eyes, but fail. The will power and reason are suspended and the emotions and perception are at the command of the operator.

Hallucinations and illusions may now be produced—the subject will believe or do anything he is told. For example a limb may be put in any position, and if the operator hold it there a moment (unspoken suggestion), the arm will remain in the same position for an incredible length of time. This is not, as Charcot calls it, a cataleptic state, but the limb having been thus placed by the operator the subject imagines he must so retain it—he is thus acted upon by suggestion. The slightest hint is sufficient, when profoundly hypnotized, to make him do as is wished. Anæsthesia may also be induced readily; even at the first sitting the sense of pain may be so greatly abolished that the part acted upon by suggestion may be pinched or cut to a marked degree with no flinching or remembrance of pain afterward. At the second or third seance this anæsthesia may be made so marked that the arm might be cut off with a hand-saw without the tremor of a muscle on the part of the subject. Herein lies the applicability of hypnotism in surgery; all operations of minor surgery can be performed, and in susceptible patients even the most severe surgical procedures can be carried out. Dr. Axtell, in his admirable paper (Kansas City *Medical Index*, 1889), says: "It is possible to use hypnotism even in severe surgical operations. A subject must be hypnotized a great many times before anæsthesia would be carried to such a degree, yet there is a large number of people on whom it could be done." While many times this is true, it is not always necessary to have repeated sittings before operative measures can be instituted. Thus in a case of inflammatory talipes, operated upon before the Grand River (Mo.) Medical Society recently, I hypnotized the patient, who suffered from aortic regurgitation and a chronic nephritis, and in the hypnotic state he sat as unconcerned as could be while the exceedingly painful manipulations were being carried out. At the most painful period I said to him: "That doesn't hurt you, does it?" His laughing reply was: "No; it feels good!" This man had never been previously hypnotized.

As an illustration of the extent to which this can be carried, I am permitted by my friend, Prof. A. B. Shaw, of St. Louis, to repeat one of the most remarkable cases on record.

May 5, 1890, at St. Mary's Infirmary, a male patient, æt. 38 years, was hypnotized for an operation. He suffered from epilepsy of traumatic origin, presenting among other symptoms Jacksonian convulsions and hemiplegia. On account of other troubles (heart and kidney) it was decided that neither ether nor chloroform would be safe—hence the use of hypnotism. The subject was soon declared ready, and the operation of trephining was done in the presence of Drs. LeGrand Atwood, Superintendent St. Louis Insane Asylum; W. B. Dorsett, Superintendent St. Louis Female Hospital; H. A. Jones, Physician to City Poor House; W. A. McCandless and R. L. Moore, of St. Mary's Infirmary, and a dozen others. The operation lasted one hour, no chloroform, ether or other analgesic, save hypnotism, being used; yet the patient sat as fixed and immovable as if carved from stone. It is the most phenomenal case in the history of surgery.

I have used hypnotism in amputations and with decided success. I am of the opinion that, as we have just begun to deal with hypnotism in a scientific manner and still get such marvelous results, that the future holds much in store; we have much to expect from the use of hypnotism in surgery.

INFLUENZA of a very malignant type is extensively prevalent in Japan. In Tokio alone 100,000 cases are said to have occurred.

CASE OF REMARKABLE INJURY, WITH RECOVERY.

BY E. A. COBLEIGH, M.D.,

Dean and Professor of Theory and Practice of Medicine in the Chattanooga Medical College, Chattanooga, Tenn.

Read before the Tri-State Medical Society of Alabama, Georgia and Tennessee, October 15, 1890.

I have the pleasure of presenting to you to-day the report of a case of injury which, to me at least, has appeared unique, both in the light of its final result and as to many of its manifestations while under my observation. With the report I hope to present the patient himself.

About 3 o'clock on the afternoon of August 6, last, I received a telephone summons to go hurriedly to a manufacturing establishment in this city, where I was informed that a workman had just received a terrible injury. Dr. Leaket was sitting in my office at the time, and I invited him to accompany me. Taking my emergency satchel along, we repaired with due dispatch to the place. Before reaching our destination, we could see several persons bearing a wounded man from one department of the works to another, nearer the street, the victim being transported in a chair, and in an almost upright (sitting) position. Having deposited their burden, by the time of our arrival, on a cot which was at hand, I stripped him to the waist, and undertook to place him in a recumbent position. This was at once found to be utterly impossible, owing to the nature and degree of the injury sustained, every effort to materially lower the head and shoulders being attended with symptoms of collapse of an urgent nature. So he was propped in a semi-recumbent position, and the following history was obtained while we made our physical examination:

An old well had become inadequate for the purposes of the rapidly enlarging factory, and for a considerable period of time work had been going on in the way of deepening it till it had reached sixty feet below the surface. During the day a heavy steel drill had become so dull that another had been substituted for it. On returning it to its place a loop of rope was fastened around it, and a fellow workman was lowering it to the men below when the noose loosened at a depth of about ten feet from the surface, slipped off and let the implement go dashing down on the men at the bottom, and it had struck the patient lying before me, after falling about forty-five or fifty feet.

At the bottom of the well, Tony Houston, colored, the wounded fellow, was standing upright on a little rough platform which had been built to afford the striker an elevation from which to wield his sledge.

The implement went down sharp end first, and nearly or quite perpendicular, striking the victim on the back of the neck, ploughing through the tissues to emerge from the right side of the chest, there protruding about eight inches, absolutely impaling him. Notwithstanding the force of the blow, Tony was not fairly knocked down, but was forced against the sides of the well in a sort of crouching position, without losing consciousness for a moment even. He avers that he was standing absolutely erect at the time of the injury, though I surmise that he was very slightly stooping forward. Realizing what had happened, he stepped down from the platform, supporting himself against the side of the wall, and called on a fellow workmen to pull out the drill. A very tall and stalwart negro (whom I saw at the time of my visit) undertook to do his bidding, standing on the same level with Tony, and finally using both hands for the purpose; but he failed. So he mounted the platform and tried again by a steady pull, which did not budge the impaling instrument; and in his excitement, determined to get the thing out, he gave it that to and fro motion, with the powerful leverage of the long handle, which one often sees resorted to in pulling posts out of the ground. At this juncture the drill loosened and he extracted it from above—just the reverse of its direction of entry.

Tony was now set in a bucket, very imperfectly fastened to the well-rope by a noose passed around him, and, holding himself mostly by his own efforts, was drawn to the surface, placed in the chair before mentioned, and conveyed to the work-room adjoining the office.

Tony was a man of magnificent physique and splendid muscular development. He is 28 years old, scarcely ill a day in his life, though formerly given to occasional "spreeing," and weighs 185 pounds.

My examination developed that the wound of entrance was situated one and one-half inches to the right of the spinous process of the fifth cervical vertebra, just at the point where his neck began to broaden toward the shoulders, and the drill had only missed the spinal column by a hair's breadth. Passing downward and very slightly forward, and to the right, leaving a rather smooth opening (oval perpendicularly), with somewhat inverted edges, it resembled the old-fashioned wounds of entrance of round shot, not very large—indeed, not so immense as one would expect from the size of the wounding instrument, yet sufficiently so for the cervical muscles and fascia to show plainly in the wound, especially if it was forcibly opened. The shape of the wound made it close like a valve, yet air was entering and being expelled with a pink froth at nearly every respiratory effort, though there was no considerable hæmorrhage. I first thought this air came from the air-passages of the lungs, but I have later formed the opinion that it was sucked in and out by the action of the diaphragm during the process of breathing.

From here the drill passed into the chest cavity between the scapula and clavicle—at its very apex—without damage to either of these bones, impinging on the third and fourth ribs which were both fractured from behind, directly in the line of the wound (evidently the fragments being parted as by a wedge while the drill was in situ) then, passing down on the anterior surface of the fifth and sixth ribs without injury to either, and emerging by a great gaping and ragged wound, just at

the inferior border of the latter rib and over the interspace below, its center being two inches below and one and one-half to the right of the nipple. There was only moderate bleeding from this wound, into the opening of which I readily introduced the tips of three fingers, and no air was escaping here. The skin and subcutaneous tissues seemed to be so absolutely deadened by the magnitude of the injury sustained as to have completely lost all their normal elasticity. I passed two fingers up the tract of the wound their full length, entering the pleural cavity with their tips under the broken ends of the lower fractured rib, which could be distinctly felt. Everything felt torn and indefinite, the ends of the broken bone easily movable, but I was not able to satisfy myself by the touch with any degree of certainty whether the subjacent surface of the lung was injured or not, though I thought it was. From top to bottom of the wound in its entire length it measured in a direct line at that time 14½ inches, and he must have had buried in his anatomy 14½ inches of steel, an inch in diameter.

There was very intense pain and a marked degree of shock, as shown mainly by the pulse. The integument, however, was quite clammy. There was very extreme rapidity and difficulty of respiration, some gasping, and I was strongly of the opinion that he was going to die in a short time, especially as I found the signs of depression increasing fast, the pulse losing all tone, flickering, irregular, intermittent, and the mucous surfaces blanching. I so expressed myself without hesitation to the employers, but added that in a few rare cases men had recovered miraculously from seemingly as desperate injuries.

He was at once given $^1/_{100}$ gr. strychnia, ¼ gr. morphia and $^1/_{100}$ gr. atropia hypodermatically. In fifteen minutes this was repeated, and twenty-five minutes later the strychnia was again resorted to. Very perceptible reaction resulted as shown by the improved state of pulse, and an hour and a half after I first got to him I had him removed to his home, one square distant. All motion was exquisite torture to him, especially the slightest moving of the right arm or the neck. Thus far the only treatment of the wounds by me consisted in applying pledgets of iodoform gauze over both openings, which readily adhered in place by the oozing from same. No alcoholics were given from the start, as I was anticipating hæmoptysis at any moment, and feared the least over-stimulation. There was only a slight (suppressed) cough, and no spitting of blood did take place, nor was there any emesis, though it was several times seriously threatened.

At his house he was disposed in nearly the same position previously resorted to, but put on a cot. Indeed he could not be laid down at all, every effort producing the most violent pain and alarming dyspnœa. Without further medication and no other dressings, I left him for an hour, to meet another previous engagement.

On my return he was resting as well as could be expected. Auscultation showed only shallow respiration in the upper part of the right side, almost no motion at all of the injured side of the thorax, solidity of the whole lung except the region of the upper lobe, and this locality afforded all kinds of coarse and fine moist rales. I should have stated at first that a previous auscultatory examination had shown the same state of affairs when the injury was received. There was no tendency to the least displacement of the ends of the broken ribs, and every movement of any part of the body, but especially of the head, neck, right arm and trunk, proved so very painful that I felt secure of no danger from this source, and I determined to leave him with nothing on the body save the gauze, and a blanket to cover the surface. Morphine in sufficient doses to secure for him as reasonable an amount of comfort as possible was ordered, and he was left for the night in the care of two excellent attendants. Temperature now was normal, and pulse of good volume, but quick, owing to the loss of respiratory surface of the lung.

The dimensions of the drill were found to be as follows: six feet long, one inch in diameter, weighing seventeen and three-quarter pounds.

Next morning, the 7th, I found Tony had passed a very restless, wakeful night of suffering, but otherwise was not materially changed in condition from the night before. There had been but trifling hæmorrhage from the lower opening, chest still full of blood-clot, rales as before, no cough nor expectoration to speak of, and no blood in what he did spit up. But there persisted a very peculiar respiratory sound and which I have never heard before, nor can I describe it with any degree of precision. This was mingled with the other numerous chest rales, and the best description I can give is to liken it to the puff of the valve of a blacksmith's bellows—short, sharp, coarse, deep in tone, heard with both respiratory movements, but best and most pronounced at the beginning of expiration. It sounded much like air passing into the chest cavity from the larger tubes of the bronchi, yet I never could clearly make out that this was the case. No air was now passing through the openings made by the drill externally and there were no signs of emphysema of the tissues. Talking above a whisper was impossible, seemingly from a loss of power in the vocal cords or the muscles required for phonation. This latter continued for three or four days and disappeared gradually. Right arm was absolutely powerless, also continuing for many days, seeming to depend on the soreness of those muscles needed in its movements at the shoulder and neck, as well as the injury done to some of them directly or by the breaking of the ribs to which they happened to be attached. Patient was still compelled to half sit, in one position solely, reclining on the back. I adjusted a bandage around the whole of the thorax, using a stout towel for this purpose, drawing it pretty tight and fixing it with safety pins over the gauze, which had been renewed. No straps were used, as immobility of the right chest was perfect enough for all practical purposes; there was no tendency to any displacement of the broken ribs.

My impulse was from the very first to enlarge the wound of exit or otherwise provide for free drainage from the chest cavity, fully anticipating extensive empyema, but this was deferred, mostly because I regarded the prognosis as desperately bad from the beginning. Pulse was now 82, respiration 40, and temperature $100^3/_5$, showing reactionary fever. Appetite had improved. At 9 P.M., pulse was 86, respiration 32, patient sleeping. Opiates, a placebo, and cleansing of the external wounds were the only remedial measures employed. Appetite had become craving during the day. Diet restricted to liquid foods in small quantity frequently repeated, so as not to oppress the lung action by distension of the stomach. Mainly confined to milk. Very thirsty.

On the 8th, at 9 A.M., pulse 96, respiration 36, temperature, 100. Rested well nearly all night.

His pulse on the 12th was 86, temperature, $100^3/_5$. Other symptoms as before but everything slowly improving. Rales, except the valve sound, all gone. Absorption of the clotted blood in the pleural cavity gradually taking place, and no special symptoms of interest. No fluctuation in chest and no signs of pus there. Wounds suppurating, but only a trifle.

By the 7th, temperature had fallen to normal, absorption had freed the entire surface of middle lobe of the lung and part of the lower lobe so that respiration was taking place nicely in them. Pulse was still rather weak and rapid and he was put on general tonics—mainly quinine and iron—with generous feeding. By the 20th he could be moved from the couch to a chair so as to have his bed "made up." He slept well of nights. No cough worth mentioning at any time. Wounds granulating nicely under the simple dressings used, with very little suppuration.

Convalescence was rapid and uninterrupted; he is well now, and I regard this case as one of remarkable recovery, fit to be recorded along with the celebrated "crow-bar" case of Mains, which was formerly classical in all the standard works on surgery, and the later case of abdominal perforation by a railroad coupling-link which happened a few years ago in Kentucky. I consider it remarkable not only in itself and the recovery of the patient at all, but unique in many of its minute features. The escape from injury of any of the large vessels in the neck was most fortunate. So also as to the brachial plexus of nerves; and the subclavian vessels. Had it happened to the other side of the neck this would probably not have been the case because of the heart's relation to that side. The bare missing of the spinal column was another matter of peculiar luck for the patient. Probably no direction for perforation of the chest cavity with the same instrument could have been deliberately selected to better advantage for the victim.

Again, I regard the case as unique because of the total absence of any active or high grade of inflammation of the pleura or pulmonary tissues of the injured side, the lack of any empyema as subsequent to the admission of free quantities of air to the pleural cavity, and the freedom from serious cough hæmoptysis. I changed my first views as to the perforation of the lung, and came to the conclusion that the instrument passed down along the front surfaces of the lung, which it doubtless pushed aside. That the surface of the lung was injured, is not untenable I think, the drill probably ploughing a furrow of some depth along its track.

THE FEVERS OF MIDDLE TENNESSEE AND THEIR TREATMENT.

BY J. C. SHEPARD, M.D., WINCHESTER, TENN.

Read before the Tri-State Medical Association of Alabama, Georgia and Tennessee, at Chattanooga, October, 1890.

I have been observing the fevers of Middle Tennessee for nearly forty-five years, and studying them as best I could—I say as best I could—as my work has principally been in small towns and in the country, I have seldom had the opportunity of making post-mortem examinations, and, therefore, have not studied their lesions; neither have I been able to study their etiology with the microscope, as have some of our more fortunate brethren, but I have had to content myself with giving my attention to their symptomatology, their course, and the effects of treatment on them. This much said, my observations are not likely to have more importance attached to them than they deserve. And yet I feel that my opportunities for such study have not been altogether devoid of advantages.

As is well known, the two geological divisions of the State, the central basin and the highland rim, constitute nearly the whole of Middle Tennessee. The former is about 650 or 700 feet above the level of the sea; the latter being about 1000 feet above that level.

The basin—lower silurian—is a very rich country, and is in a very high state of cultivation. It is a limestone formation. There is lime—the carbonate—in the rocks, lime in the soil, lime in the water, and lime in everything.

The highland rim, 300 or 350 feet above the basin, is in the great carboniferous formation, but is subdivided, at least on its eastern side, into two lesser, and very dissimilar divisions. The inner one, immediately surrounding the basin, is a siliceous or sandy formation, which abounds in the best of free stone water, with many fine mineral springs, but with a very thin soil. This division being a sandy formation, water does not remain on the surface, but percolates deep down into the earth, consequently malarial fevers have always been infrequent in it.

The outer division of the rim, sometimes called the "red lands," is a lime-stone formation, with a clay subsoil. It is a beautiful, fertile, and fine farming country, but its distinctive feature, so far as this paper is concerned, is its clay sub-soil, through which the water can not pass, consequently it remains on the surface, in

ponds and marshes, and malarial fevers are, or were in early times, quite common in it. And yet there are high and dry sections of this division, where such fevers were never very prevalent. East of the rim rise the Cumberland mountains, known by geologists as the Cumberland tableland, which is also in the carboniferous formation, and is 2,000 feet above the level of the sea. It is sand-capped, with a poor soil, but its water and air are pure, and it has always been almost, if not entirely exempt, from malarial fevers.

This divides Middle from East Tennessee, and belongs equally to them, at least it will be so considered in this paper, so far as Middle Tennessee is concerned.

My town, Winchester, is situated in the outer division of the rim, in the "red lands," but near its inner division. My work has principally been on the rim, in both its subdivisions, but I am in easy reach of the central basin, to which I make frequent visits; and I am also near enough to the tableland to make an occasional visit there. This I consider a great advantage in studying the fevers of the country, so diversified in so many respects—as varieties of soil, differences of altitude, and, consequent, differences of temperature.

We will now take a nearer look at the fevers of Middle Tennessee.

In early times, say from the first settlement of the country up to about the year 1840, while the country was new, and being cleared up, and being prepared for its present high state of cultivation, the fevers were altogether malarial. They were periodical, intermittent, and remittent. They sometimes became congestive, or malignant. They prevailed almost entirely during the summer and fall, but there was an occasional vernal return, particularly of an intermittent. They were found only along the streams and on the low lands; the high lands being exempt from them. And I particularly call attention to the fact that they were very prevalent in the basin, not so prevalent in the rim; but of this division they were more prevalent on the "red lands" than on the inner, or siliceous, portion; in fact, they were seldom seen in that section, and they were never seen on the mountain or tableland, at least never originating there.

There was no difficulty in diagnosing those fevers—a differential diagnosis was hardly known then—and there was no difficulty in their treatment. Quinine cured them, and it cured them promptly. As mentioned above, they were periodic—quinine was an antiperiodic, and enough of it given, the patient was soon well.

The fevers, and most of the other diseases of that period, were considered *sthenic*, and bore depletion by the lancet, or otherwise, to an extent that would now be considered hazardous in the extreme.

About the year 1840 a great change came over the diseases of the country—a revolution made its appearance. Typhoid fever began its terrible career. It came as gently as the falling snow, and yet as ruthlessly as an invading army, and no pen could describe the ravages of its march. It took possession of the whole country, prevailing alike on the high land and the low; was as prevalent, in proportion to population, on the table land as in the basin, in the siliceous portion of the rim as in the clay lands. And it had all seasons for its own. It may not have been so prevalent in summer as in winter, but it was found at all times.

It was typhoid fever everywhere, and every case was typical; and it impressed its characteristics, at least to some extent, on most of the other diseases of the country, which from that time to this have been more or less asthenic, or adynamic. No more blood-letting; harsh purgatives were all laid aside, and all sedatives were used with the utmost caution. And quinine ceased to be a specific.

Such and so great was the revolution I will not say absolutety that there were not then malarial fevers, to some extent, along the streams and low lands of the basin, and on the clay lands of the rim, but if so, they were so overshadowed by the prevailing typhoid fevers, as not to be observable without the most careful enquiry. But typhoid fever was prominently manifest from the highest point of the mountain to the lowest valley of the basin. The habitant of malarial fevers was the marshes and low lands; that of typhoid fever the high lands as well as the low.

Typhoid fever held absolute sway—was master of the situation about twenty years—perhaps not quite so long, when a change was again observable, but not so manifest as the one above alluded to.

The symptoms of malarial fever began to be observed again, but invariably in connection with those of typhoid fever. It seemed as if, so to speak, malarial fevers were again recovering themselves, as if the conqueror had lost his prestige, and the conquered were again asserting themselves. I have seen this in real life—very real—and so have my hearers. From that time the symptoms of both typhoid and malarial fevers were seen side by side in the same cases, for a number of years, say fifteen or twenty. I don't know what the lesions were, neither do I know what the causes were, but the symptoms of both diseases were plainly seen by all men, even by the non-professional.

It might have been, and probably was, that the malarial symptoms were more manifest in the early stage of the disease, and the typhoid symptoms in the later stages, but the course of the disease was that of typhoid fever, was continued fever, and no amount of quinine would arrest it.

It was during this period that the theory of typhomalaria came into vogue. I hardly know how or when it happened, but I found myself, in common with most of the physicians whom I met, holding that theory. The facts that I saw all seemed to favor that theory, and I settled down in the conviction of its truth, although I had not then investigated the matter to any considerable extent.

But this theory is not incompatible with the further theory that in such a compound fever, the typhoid element may predominate in one section of the county,

and the material element in another section—local causes favoring the one element in one section, and the other in another, which I think was really the case. For instance, on the table land, where malaria is, and always was, almost unknown, the disease approaches more nearly to the old typical typhoid fever than is the case in the basin, 1,400 feet nearer the sea level, and where, in fact, it is more like the malarial fever was before the advent of typhoid fever. And this is apparent on a smaller scale. In the "barrens," or siliceous division of the rim, it is more typhoid, while on the outer division, or clay land, it is more malarial.

These two divisions of the rim, it will be remembered, are lying side by side of each other; they are of the same elevation, 1,000 feet above the sea, and in the same great geological formation, the carboniferous, although they differ geologically in sub-division, the one having a sandy soil, the other a clay, this demonstrating most clearly the influence of geological formation on disease.

But behold another change in the fevers of the country which has been going on for a number of years, perhaps ten or a dozen. During this period the typical symptoms of both typhoid and malarial fever have gradually disappeared—have faded away. So that we do not see them in conjunction as was so common a few years ago, who now ever sees a typical case of typhoid fever, or even a typical case of malarial fever as that disease was seen fifty years ago? Or even a typical case of typho-malorial fever as that disease was seen a few years ago? Occasionally a case of intermittent fever is seen, where, in the malarial period, hundreds were seen, and if a remittent fever should make its appearance it soon takes up the line of march as a continued fever in combination with or in subordination to a typhoid fever, but not as a continued malarial fever.

I have now traced the two great fevers of Middle Tennessee—typhoid and malarial—from their origin, through their changing fortunes, in their combination and fusion down to the present time. And although the fever now—for there is only one fever now—shows none or but few of the peculiarities of these fevers in the past, yet if they have not lost themselves in the fever of to-day, I don't know where they are.

I sometimes illustrate this to my satisfaction thus: After the war our State was full of Northern and Southern people—they had their distinctive Northern and Southern peculiarities, which could be seen at a glance. But time has effaced these peculiarities, and we are now a homogeneous people—all Tennesseeans!

The sum of the whole matter is, that aside from an occasional intermittent, there is only one fever in Middle Tennessee to-day, which is typhoid and malarial, more typhoid in some sections, and more malarial in others.

It has been maintained by some that there is a continued malarial fever *per se* in this country, which I do not believe. Malarial fevers in Middle Tennessee, so far as my observations have extended, have always been periodical, and whatever continuity there may be in them now, they owe to their union with typhoid fever which is a continued fever.

The foregoing observations would seem to show that the fevers of Middle Tennessee have not been fixed and unchangeable in their course, but to use a popular phrase of the day, they have been influenced by their environment. If such has been the case in the past, it will doubtless be so in the future. At least I shall believe these views to be correct, until the contrary shall be proved.

However, I am well aware that the microscopists of the day are making some wonderful revelations, and I hold myself in readiness to bow to their decision whenever they show me that I am wrong.

But I am not here to-day with my iron-barred theory of fever. I mean the fever of to-day, and of Middle Tennessee. I am well aware that the subject is in a somewhat chaotic condition and I am constantly looking for new light and more light on it. I cling not to the dead past, but am ready to join hands with the living present. I am ready to abandon the terminology of the past, and adopt new definitions if they will better answer our purpose.

I propose to say something about the treatment of the fevers or fever of Middle Tennessee, but it will not be much.

I don't know anything about curing a continued fever. I don't undertake to arrest it, or cut it short, as is sometimes said. And yet I am unremitting in its management and treatment, and often see patients recover under such a course that I think would otherwise have died.

Of course cold water has its value in the treatment of fever, but by baths I have found it impracticable in country practice and believe it to be so anywhere outside of a hospital.

I prescribe the new antipyretics, particularly antifebrine and phenacetine, and think I accomplish much good with them, but I watch them very closely.

In old times, when malarial fevers alone prevailed, quinine cured them. They were periodic; quinine was an antiperiodic and broke up periodical fevers; but no amount of it will arrest a continued fever, even for one hour. It has been claimed that in the continued fever of the country, it will eliminate the malarial element, but it is not certain that it even does that much, and it is very certain that it does not arrest the disease, and therefore it is of questionable utility in such cases. But quinine is also an antipyretic—as such it is not, however, as efficient as the articles above named. And to be efficient, more of it is required than is safe, given throughout an attack of fever. Its antiperiodic property may make it valuable in a threatened congestion; and its tonic property may make it do good service in a convalescence.

Then, all things considered, there is, in my opinion, entirely too much quinine used in the treatment of con-

tinued fever in Middle Tennessee. More of it, however, may be profitably prescribed in some sections than in others—more in the low lands than in the high lands. In excessive quantity, it does great harm. It disturbs the stomach, depresses the heart, and sometimes injures vision and hearing.

Physicians are often blamed, nowadays, for prescribing alcoholics in the treatmant of disease. They are accused of making drunkards of their patients, and increasing the tide of dissipation that is threatening the overthrow of our civilization. Grave charges, indeed! And the assertion is often and boldly made that we could dispense with these destructive agents and use other means equally valuable, but devoid of danger. In reply to all this, I only wish to say that I often think my fever patients are benefited by the use of alcohol in some form, and that some of them, if not many, would die without it. And as I do not know any substitute for it, I shall feel it my duty to continue to prescribe it.

ORIGINAL ABSTRACT.

CONSTANT GALVANIC CURRENT IN GYNÆCOLOGY.

BY DR. APOSTOLI, PARIS.

Abstract of a Paper read before the International Medical Congress at Berlin.

I. In gynæcology, the constant galvanic current finds its principal indication in the treatment of endometritis and fibroma; effectual to the highest degree in circulatory and painful troubles (amenorrhœa, dysmenorrhœa and metrorrhagia); it is of great service in arresting the evolution of benign neoplasms, and in causing the absorption of peri-uterine exudates. It exercises a very beneficial resolving action in many peri-uterine inflammations and in certain cases of catarrhal ovaro-salpingitis, but it is inefficient, and, in large doses, even harmful, especially if the intra-uterine pole is negative, in cases of suppurative inflammation of the uterine appendages.

The variable degree of intolerance for it, which increases with the inflammatory condition of the appendages, ought to serve us as a valuable means of diagno sis of the existence and nature of peri-uterine collections of fluid (hæmatic or purulent), either unrecognized or simply suspected, and it ought to serve as a means of hastening surgical interference which has been delayed or refused.

II. The effects of the galvanic current are polar and interpolar—the interpolar, trophic and dynamic action which increases as the square of the intensity employed is added to the polar action; first, the latter uses each pole according to the end desired, as Apostoli has explained, then the calorific action follows, having been developed by the passage of the current (for increasing the interstitial circulation); and finally comes the antiseptic action of the positive pole, of which Apostoli and Laquerriere have recently given experimental demonstration.

III. The application of strong galvanic currents, employed in various manners and above 50 milliamperes in strength, regulated according to the tolerance of the patient and the multiple clinical indications, forms the fundamental basis of Apostoli's method.

It finds its justification:

a. In the utilization of circulatory drainage, which is a direct consequence of the calorific action due to the resistance to the passage of the current, and which is proportional to the square of the intensity.

b. In the antiseptic or germicidal action, which increases as the intensity of the current employed.

c. In the rapidity and efficacy of the effects produced, which are proportional to the square of the electrical energy, according to a formula analogous to that of the measurement of the energy of other natural forces: $q. = \frac{1}{2} m. V^2$.

d. In the more easy generalization of the method in rebellious cases (subperitoneal fibromata and fungous endometritis), and in young women.

e. In the removal of relapses, which, other things being equal, are less to be dreaded in proportion as a more intense application has been made.

IV. Even if the vaginal application of the current (which was introduced for fibroids by Cheron, and which has since been employed by Martin, Bracket, Meniere, Quinns, Carpenter, Munde, etc.) gives good results, they are inferior to those obtained by the intra-uterine method. The latter ought to be given the prefence:

a. Because it uses the whole maximum of the current employed and of its energy.

b. Because it utilizes the antiseptic action of the positive pole, which is wholly a local action, and which becomes obliterated in the interpolar circuit, and at the site of the negative pole.

c. Because it often contributes the derivative and caustic action of the intra-uterine application, thus treating at the same time either simple endometritis or endometritis which so often complicates fibromata and peri uterine inflammations, thus assuring a cure more rapid, more complete and more permanent.

d. Because it permits better than vaginal applications, the attenuation of the pain, and renders more endurable the employment of high doses, and because it assures, finally, a greater efficacy, by rendering possible an increase of applied intensity and of the circulatory drainage, which it entails.

V. Vaginal galvano-punctures (from 2 to 5 millimeters in depth), made by the aid of a golden filiform trocar, insulated, except at the point, are very often a beneficial complement to the intra-uterine therapeutics of Apostoli, because they localize the galvanic action better, and because they render more effectual in certain cases the application of small and medium-sized doses.

VI. The innocuousness of Apostoli's intra-uterine

therapeutics is established first by the parallel innocuousness of chemical or bloody cleansing of the uterus, but particularly by the statistics both of the entire world and especially of Apostoli himself.

From July, 1882, to July, 1890, he made 11,499 galvanic applications, which are divided as follows: 8,177 positive galvano-caustic intra-uterine applications; 2,486 negative galvano-caustic intra-uterine applications; 222 positive and 614 negative vaginal galvano punctures.

He treated 912 patients. Of this number 531 had fibroma, 133 endometritis simple, and 248 endometritis complicated by peri-uterine inflammations.

These cases occurred as follows:

In the clinic: 313 fibroids, 70 simple endometritis, 163 enpometritis complicated by peri-uterine inflammation.

In private practice: 218 fibroids, 63 simple endometritis, 85 complicated endometritis.

Apostoli has had three deaths imputable to operative faults. Two of them followed galvano-puncture (one for subperitoneal fibroid and the other for ovaro-salpingitis). The other death followed a galvano-caustic application in a case of ovarian cyst mistaken for a fibroid.

The author has observed 30 cases of pregnancy follow intra-uterine galvanic applications.

Enlarged Tonsils.——It is rare nowadays to find a surgeon who does tonsillotomy, or uses the tonsillotome on children; at least, so that hæmorrhage is not at all frequent at present from the ablation of the tonsils. Dr. Quenu, in speaking of a recent case, says that he is astonished to find that any one should propose tonsillotomy in a child. For four or five years in all, the surgeons have taken to galvano-puncture in all cases of enlarged tonsils, and, in fact, there is little or no danger of hæmorrhage in its use. The thermo-cautery is not used, as it not only frightens children, but often makes burns in the parts near by, while its cauterization is often insufficient. The cauterization should be profound. The advantages of galvano-cauterization in such cases is of course that the cautery can be applied cold, and the child does not see the fire at all. Two or three points should be made into each tonsil. Cicatrization occurs in ten or twelve days, and the tonsil is now divided in two or three parts, so that its subsequent division can be accomplished in a second operation, without trouble or danger of hæmorrhage, and without the use of chloroform.—*Societe de Chirurgie.—Ther. Analyst.*

Treatment of Gall Stones.—The usefulness of pilocarpine seems to be increasing. According to the *Bulletin Gen. de Therap.*, Lekarckie makes the assertion that pilocarpine is almost a specific in the treatment of gall stones. It relieves at once the pruritus of jaundice. The dose hypodermically is one-eighth of a grain twice a day. Thirty cases have been treated successfully.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., Editor. W. C. MARDORF, M.D., Associate Editor.

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SATURDAY, NOVEMBER 22, 1890.

Koch's Anti-Tuberculosis Treatment

The interest awakened by the recent report of Professor Koch, before the International Congress, that his researches with regard to anti-bacillary agents that could be used on the human subject without having toxic effects on the subject himself had given promise of being crowded with success, is fast becoming as far-reaching and all-absorbing as was that aroused by the enunciation of the rejuvenating properties of Brown-Sequard's elixir. But Koch has not overlooked the lesson taught by the disastrous effects of the indiscriminate, careless and haphazard use of the injections of this fluid; and he has wisely refrained from imparting any information as to the components of the agent used, desiring to await further confirmation of its merits at his own hands before running the risk of world-wide condemnation by incompetents.

The expressions of Nothnagel, before his students a few days since, are enthusiastic but provided further investigation proves the correctness of the conclusions afforded by Koch's experiments made thus far are not undeserved—"We face one of the greatest intellectual achievements in the province of medicine for centuries past. This discovery has a far wider scope than Jenner's, and is, perhaps, the greatest feat in science. What inspires me with admiration is not so much the actual discovery, as the method of bacteriological research, which must serve as the basis of all future discoveries in that line. The present moment is among the most sublime that humanity has known."

Since Prof. Nothnagel has been informed by Koch of the nature of the material used, the hint implied in the above would indicate that the basis of the injection is something very different from any that has hitherto

been employed. It is known that Koch has been experimenting with the object of learning the effects of certain microbes on others, and it is a fact often demonstrated clinically, that certain affections are quelled by the supervention of others; this, considered with the frequent use of the word "lymph" in the telegraphic messages from Berlin, justifies the suspicion that such is the basis of the method.

Prof. Billroth has asserted his belief that the discovery will lead to a cure for cancer, as cancer is, in all probability, of baccillary origin.

It appears, however, that his friends and colleagues are more sanguine for the great future of the remedy than Koch himself. He asserts simply that his experiments justify him in supposing that phthisis in its earlier stages is curable by his method; that cavities already formed cannot of course be repaired. That it is especially adapted to the treatment of tuberculous deposits in joints, skin, glands, etc.

The clinical effects observed and methods of its use are given in the *Deutsche Medicinische Wochenschrift* of November 5, the cabled translation of which we give in abstract:

When taken into the stomach the curative matter proves to have no effect. It must be applied subcutaneously.

When the curative matter is applied to a patient the usual course is to inject it under the skin of the back, between the shoulder-blades. The experiments show that human beings are much more susceptible to the effect of the new substance than are guinea pigs, which have been largely used in the course of the investigations.

Prof. Koch experimented with the fluid upon his own body and described the effect. He injected 25-100 of a cubic centimeter of the fluid under the skin of his upper arm. Three or four hours after this injection was made he experienced a contraction of the limbs and a marked feeling of lassitude. At the same time he felt a desire to cough, together with difficulty of breathing. These symptoms increased rapidly, and in the fifth hour he experieneed an unusually violent rigor. The shivering lasted for nearly an hour and was accompanied with nausea and vomiting. The temperature of his body rose to 39.6° C. After a period of 12 hours the symptoms began to abate, the temperature of the body declined, and on the following day resumed its normal degree. The general reaction consists of an attack of fever, which usually begins with a chill, the temperature of the body rises to over 39, and in some instances even to 41° C. At the same time pains in the limbs are noticable. Some patients suffer nausea and vomiting. In some cases there is noticed a slight icteric coloring, or exanthema resembling measles on the chest or neck. The symptoms just described begin to manifest themselves four or five hours after the injection. They last from 12 to 15 hours. The patient is not much affected by the attack induced by the fluid, and, after it is over, feels comparatively well—even better, in fact, than before the injection.

The second, or local reaction produced by the injection of the fluid in a patient suffering from tuberculosis can best be observed in persons whose tuberculous affections are visible, as, for instance, in the case of persons suffering from lupus. The changes which ensue in these cases show in a surprising manner the specifically anti-tuberculous effect of the remedy. Within a few hours after an injection of the fluid has been under the skin of the back, the lupus sores begin to swell and redden. During the fever the patient experiences the symptoms as already described, the swelling and reddening of the sores increase until finally the lupus tissues assume in places a dark brown tint and a necrotine condition. After the subsidence of the fever the swelling of the lupus sores gradually decreases and possibly disappears altogether within two or three days. Meanwhile, however, the lupus centers have become covered with an incrustation, formed by exuding serum, which dries up as it reaches the air. These incrustations gradually form into scales, which fall off after two or three weeks.

In some instances the effect just described is produced after a single injection of the curative matter, when a red, smooth scar is left. These changes are absolutely limited in extent to such portions of the skin as are clearly recognized as lupus. In tuberculosis of the lymphatic glands, bone articulations, etc., these local reactions are less striking, but are still clearly perceptible to the eye and touch. In these cases there is swelling of the parts affected and more pain than lupus patients suffer, while in the parts adjacent to the diseased centers the surface also becomes red. The reaction produced in the internal organs, especially the lungs, when the curative substance is injected, is not, of course, open to observation apart from the increased expectoration and cough.

In all the experiments after the first injections, if any tuberculous process existed in the body, the appearances already described supervened. Absolutely no exception was noted whenever a dose amounting to one hundredth part of a cubic centimeter had been applied. One may assert with confidence, therefore, that the remedy may be considered an indispensable auxillary to diagnosis and in doubtful cases, incipient phthisis can positively be diagnosed by its use, if positive information of the nature of the disease cannot be obtained by the discovery of bacilli, or elastic fibers in the sputum, or by a physical examination.

Tuberculous affections of the glands, latent tuberculosis of the bones, doubtful skin tuberculosis, etc., can by the use of this fluid be easily and certainly diagnosed. Moreover, in cases of lung or joint tuberculosis which has apparently passed off, it will be possible, by the use of the new substance, to ascertain with certainty whether the morbid process is really and absolutely ended.

Prof. Koch expresses the belief that his remedy will certainly prove a cure for incipient phthisis. Whether, however, the cure will be final and definite, has not, he says, been clearly proved. Further experiments and

continued use of the remedy will be necessary to determine this question.

In all cases of lupus so far treated, the amount of fluid injected has been, in the first instance, one hundredth part of a cubic centimeter. Time has then been allowed for the reaction to take its full course. After a period of from one to two weeks a second injection of the same amount has been made. This treatment has continued until the reaction grew weaker and finally ceased. In two cases of lupus of the face the sores, after three or four injections, became seared and presented a smooth surface. Each one of these cases had suffered for many years and had been treated by other methods without beneficial result.

Persons suffering from tuberculosis of the lymphatic glands, bones or joints have been treated with precisely the same success. There has been rapid healing in the milder cases or cases of recent development of the disease, while in severer cases the improvement, while slower, has been steady. Patients with pronounced tuberculosis of the lungs have proved far more susceptible to the remedy than those suffering with surgical tubercular affections. Consumptives have, in almost every instance, manifested a strong reaction on greatly reduced doses. With such patients, therefore, a beginning should be made with doses of two one-thousandth parts of a cubic centimeter, or even with one one-thousandth part. From this small dose one can advance to such quantities as the patient can easily bear. In the experiments that have been conducted consumptives have accordingly first received a subcutaneous injection of one one-thousandth part of a cubic centimeter. Then, when the temperature increased, the same dose was applied daily until no further reaction occurred. Thereupon the dose was doubled, two one-thousandth parts of a cubic centimeter being injected regularly until again no reaction occurred. This method was continued, with almost always an increase of one one-thousandth part of a cubic centimeter or almost two one-thousandths up to one one-hundredth part, and so on upward. In this way the patient would be brought to take very high doses almost without fever, and almost imperceptibly to himself. Consumptive patients who are still fairly strong reach increased doses much more quickly, and favorable results follow with corresponding rapidity. As a general rule the coughing and expectoration are increased somewhat after the first injections. Then they become gradually less, and, in the most favorable cases, will ultimately wholly disappear. In the cases experimented upon under the direction of Prof. Koch, the expectorations gradually lost their purulent property and assumed a mucous character. The number of bacilli expelled usually decreases only when the expectorations begin to assume the mucous appearance. The bacilli then disappear entirely for a time, but on occasions again appear until expectoration totally ceases. At the same the time night sweats cease, the patients begin to look better and to increase in weight. Patients who have been treated in the early stages of phthisis have all been freed from morbid symptoms within from four to six weeks, when they may be regarded as cured.

Irrigation of the Bladder Without a Catheter.

This is a method which is, so far as we know, original with Dr. Lavaux, of France, is further described by Dr. Rotter, in the *Muenchener Medizinische Wochenschrift* of recent date. It is readily conceived that by washing out the bladder without the use of a catheter we are rid of two disadvantages, first, the inconvenience of having to introduce a catheter, and second, the possibility of setting up a cystitis by carrying in germs clinging to the catheter, a mischance which frequently occurs.

The *modus operandi* is as follows: A rubber tube about six feet in length is attached to an irrigator filled with about a quart of the disinfectant or otherwise medicated fluid; to the free end of the tube a conical tip is fastened. This tip is wrapped in disinfectant gauze which is afterward lubricated with aseptic vaseline in order to render it easier of introduction. Where the urethral orifice is very narrow a small drainage tube, to be renewed at each injection, is attached to the tip. After expelling all air from the tube by allowing the fluid to pass through it the tip is passed into the urethra to the depth of about half an inch. The patient, who has previously emptied his bladder, is lying on his back with his legs drawn up. The glans penis is firmly compressed around the tip of the tube with two fingers, and the irrigator or vessel containing the solution is gradually raised a few feet at a time. With quiet respiration and the patient waiting, the liquid begins to flow into the bladder in from ½ to 2 minutes, according to the amount of resistance offered by the sphincter. The amount of fluid gaining entrance is gauged by the state of the irrigator or by percussion of the abdomen, or finally by watching the ascent of the bladder above the pubes. By raising or lowering the irrigator the influx of fluid into the bladder may be regulated. When the bladder is full the patient evinces it by manifesting a desire to urinate. If the tip is now removed from the urethra the fluid issues forth in a strong stream.

In washing out the bladder in cystitis the author uses the solution which is distinguished by his name, at a temperature of from 28 to 30° C. (82 to 86° F.); this is readily borne by even the most sensitive patients without any disagreeable reaction, and leads to a rapid diminution of the leucocytes and epithelial cells, as well as of the pain.

One great advantage of the above-described method lies in the fact that it can be used by the patient himself without danger of infecting the bladder, as happens only too often with the use of the catheter.

Calcium Sulphide in Croup.—The *Med. Reg.* (*Ed.*) recommends the use of the above drug in doses of one-tenth gr. hourly for the worst cases.

Aristol in Practice.

Dr. McLaughlin, in *Virginia Medical Monthly*, after detailing the effects of aristol, the new substitute for iodoform, in skin diseases, gives the following conclusions to which its use had led him:

1. The drug is free from objectionable odors.
2. When used over large surfaces, you obtain all of its medicinal effects without any toxic effect.
3. It possesses stimulating, alterative and anæsthetic properties; the latter effect is less marked than that obtained from iodoform.
4. It does not produce any discoloration of the skin.
5. On account of its dark color, you can readily observe how far the powder has been used on a diseased surface.
6. It is not irritating, and its use is not contra-indicated in the treatment of facial eruptions, as are chrysarobin and pyrogallic acid.
7. It appears to possess the necessary properties to make an efficient substitute for iodoform.

The Review Visiting List.

We would call the attention of our readers to the advertisement of the Weekly Medical Review Pocket Reference Book and Visiting List, on page xii. This book has been arranged and compiled entirely with the object of filling every need of the physician as an emergency assistant as well as a convenient account book; and we believe the aim has been fully accomplished.

MEDICAL ITEMS.

Epidemic Blindness.—An epidemic of blindness, probably hysterical, is reported as prevalent among the working-girls of Wheeling, W. Va.

A New Sanatarium for the air-cure, so-called—the first of the kind in France—has just been opened with some ceremony at Vernet, in the Pyrenees. The site is said to combine the advantages of a mountain and of the Mediterranean climate.

The Decimal System.—The Russian Government has announced that at the end of five years, the decimal system of weights and measures shall be the only legal standard. Great Britain and the United States will then be the only civilized nations which use the ancient systems.—although our country has legalized and adopted the metric system.

Boroglycerin Cream.—The following preparation is said to be excellent for chapped hands, lips, etc.:

Dissolve one part of boric acid in 24 parts of glycerin; add to this solution 5 parts of lanolin free from water, and 70 parts of vaseline. The preparation may be colored and perfumed.—*Lancet Clinic.*

A Mohammedan Female Physician.—Dr. Razie Koutlairoft-Hanum, a young Mohammedan woman, who was born in Crimea, recently passed a creditable examination as physician and surgeon at Odessa, and now enjoys the distinction of being the first woman of her creed to engage in the practice of medicine as understood by western nations.

A Hospital in Central Africa.—As an instance of the civilizing work now being carried on in the Congo Free State, may be mentioned the Bangala-station hospital, in the upper Congo basin, a little less than a thousand miles from the Atlantic coast. It was erected for the employes of the station, and contains forty beds, besides rooms for convalescent patients.

Ill-Health, according to the always cheerful Sir John Lubbock, is no excuse for moroseness. If we have one disease, we may at least congratulate ourselves that we are escaping all the rest. Sydney Smith, ever ready to look on the bright side of things, once, when borne down by suffering, wrote to a friend that he had gout, asthma, and seven other maladies, but was "otherwise very well," and many of the greatest invalids have borne their sufferings with cheerfulness and good spirits.

Treatment of Soft Chancres.—In the *Med. Rec.*, Dr. T. G. Davis recommends for the treatment of chancroids the application of peroxide of hydrogen until bubbling has ceased, after which the following powder is used locally:

℞ Calomelanos, - - - ʒj.
Bismuthi subnitr.,
Pulv. cinch. flavæ, - - aa ℥ij.
M.

This is painless and odorless, and is said to have proven entirely satisfactory during the past four years.

Mortality in European Armies.—Recent statistics relative to the mortality among European troops in time of peace show that the Spanish army occupies the place of dishonor in this particular, with a death-rate of 13 per 1,000. Russia comes next with one of 9, then Italy with one of 7.74. Next in order comes Austria with a mortality of, in round numbers, 7 in the thousand, France with 6, England with a little over 5, Belgium a little over 4, and Germany a little over 4. Consumption is rifest among English soldiers, and least prevalent among the French.

Against Counter Prescribing.—Some of the physicians of St. Joseph, Mo., have inaugurated a war on counter prescribing, which they claim has become so flagrant as to necessitate some action on their part. It is said that evidence has been secured, for presentation to the grand jury in November, implicating a number of druggists and drug clerks. It is reported that the testimony in one instance is that of a young man who suf-

fered from syphilitic disease, and made a contract with a druggist's clerk, who agreed to cure him in four months in consideration of $6 per month. The patient is still under treatment. The law in the case is not exactly clear, but the physicians interested in the movement believe that a conviction will be secured for the violation of the medical practice law.—*Druggist's Circular and Chemical Gazette.*

THE CURIOSITIES OF BLUSHING.—In a book on "Flushing and Morbid Blushing," Dr. Harry Campbell cites these cases: Man, æt. 27. Was a soldier, but compelled by excessive blushing to give up his profession. Man, æt. 28. Has recently had to give up the study of medicine through excessive blushing. Man, æt. 32, minister. Is so afflicted by blushing that he has latterly entirely given up duty. Another patient is a commercial traveler; and a telephone clerk is so badly affected that he turns scarlet even when speaking through the 'phone.—*Med. Rec.*

SOLUBILITY OF NEW MEDICINES.—The following table of solubilities of some new medicines may be useful to some of our readers:

One part of	Is soluble in Water.	Alcohol.	Ether.
Antifebrine,	200	10	10
Antipyrin,	1	1	50
Antithermin,	slightly soluble.	slighty soluble.	slightly soluble.
Cocaine hydrochlor.,	5	10	
Iodol,	5,000	3	1
Paraldehyde,	10		
Pyrodine,	1	1	
Quinoline tartrate,	80	150	
Resorcin,	1	1	
Salol,		5	5
Thallin (sulphate),	7	100	
Thallin tartrate,	10		
Urethane,	1	0.6	

Pharm. Rec.

HOPE FOR BALDHEADS.—Dr. P. A. Morrow, before the New York Academy of Medicine, said that he had made some scalp-grafts in the case of a man who had become somewhat hypochondriac because of a scar on the scalp, which in later years became exposed from scarcity of hair. He first took grafts from the patient's own scalp, on the opposite side, by means of the cutaneous punch, and immediately transplanted them into holes of the same size made by the same instrument in the scar tissue. Very much to his gratification, union was perfect within a week. Four grafts were first made, and he waited several weeks to see whether the hair would grow. It did. He then made transplantations from another patient's scalp, and these also grew and bore hair luxuriantly. The grafts were fully a quarter of an inch thick. There was no suppuration, no untoward result. He had employed the same method in one or two cases of epithelioma, and, while there was no indication of breaking down, there had not been sufficient time to justify conclusions. He thought the method had a wider field of application. For instance, it might be adopted in lupus, and in removing moles, warts, and other facial blemishes.

BOOK REVIEWS.

THE PHYSICIAN'S ALL-REQUISITE TIME- AND LABOR-SAVING ACCOUNT BOOK. F. A. Davis, 1231 Filbert Street, Philadelphia, Pa.

Probably no class of people lose more money through carelessly kept accounts and overlooked or neglected bills than the physician. Often detained at the bedside of the sick until late at night, or deprived of even a modicum of rest, it is with great difficulty that he spares the time or puts himself in condition to give the same care to his own financial interests that a merchant, a lawyer, or even a farmer devotes. It is plainly apparent that a system of book-keeping and accounts that, without sacrificing accuracy, but, on the other hand, insuring it, at the same time relieving the keeping of a physician's books of half their complexity and two thirds the labor, is a convenience which will be eagerly welcomed by thousands of over-worked physicians.

The system presented by the book at hand fulfils all the indications for convenience, completeness and accuracy that could be desired. It is intended for a desk-book only. The advantages claimed and substantiated for it are:

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4. No posting; one entry only.
5. Universal; can be commenced at any time of the year, and can be continued indefinitely until every account is filled.
6. Absolutely no waste of space.
7. One person must needs be sick every day of the week to fill his account, or might be ten years about it and require no more than the space for one account in this ledger.
8. Double the number and many times more than the number of accounts in any similar book; the 300-page book contains space for 900 accounts, and the 600-page book contains space for 1800 accounts.
9. There are no smaller spaces.
10. Compact without sacrificing completeness; every account complete on same page—a decided advantage and recommendation.
11. Uniform size of leaves.
12. The statement of the most complicated account is at once before you at any time of month or year—in

other words, the account itself as it stands is the simplest statement.

13. No transference of accounts, balances, etc.

To all physicians desiring a quick, accurate and comprehensive method of keeping their accounts, we can safely say that this one should fill the bill.

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No. 2, 600 pages, for 1800 accounts per year, size 10x12 inches, bound in ¾ Russia, raised back-bands, cloth sides, in the United States, $8.00; in Canada (duty paid), $8.80. For sale by J. H. Chambers & Co., 914 Locust Street, St. Louis, Mo.

Medical News Visiting List, 1891. Lea Brothers & Co., Philadelphia. Price, $1.25; with thumb-letter index, 25 cents extra.

This handy little pocket account book is one of the neatest and most complete that we have seen. It is arranged for 30 patients weekly. In addition to the daily call list, space is given for clinical notes of patients, memoranda of consultations, obstetrical engagements and practice, vaccinations, deaths, addresses of patients and nurses, and cash accounts. Many useful notes are incorporated for the assistance of the practitioner in emergencies. For sale by J. H. Chambers & Co., 914 Locust Street, St. Louis, Mo.

CORRESPONDENCE.

AMERICAN ACADEMY OF MEDICINE.

Editor Review.—The constitution of this Association was altered at the last annual meeting, so as to admit, in addition to those possessing the degrees of A.B. and A.M., those who can present evidences of preparatory liberal education equivalent to the same.

Dr. J. E. Emerson, Detroit, Michigan, Chairman of Committee on Eligible Fellows, will forward to any applicant copies of the amended Constitution and By Laws, List of Members, and other information as to the Academy. Richard J. Dunglison,

814 N. 16th St., Philadelphia, Pa. Secretary.

Mexico.—The new and popular pleasure ground for Americans is reached with only one change of cars from St. Louis via the Iron Mountain Route, and at greatly reduced rates for the round trip during the winter season. Grafton's famous Mexican tours in Pullman vestibuled sleepers also run over the Iron Mountain Route, all particulars of which can be obtained by addressing J. J. Grafton, 199 S. Clark St., Chicago, Ill., or H. C. Townsend, General Passenger and Ticket Agent, St. Louis, Mo. Ask for "Travels In Mexico."

SOCIETY PROCEEDINGS.

TRI-STATE MEDICAL ASSOCIATION OF ALABAMA, GEORGIA, AND TENNESSEE.

Second Annual Meeting, Held in Chattanooga, Tennessee, October 14, 15 and 16, 1890.

October 14.—First Day—Morning Session.

The Association met in Turner Hall, and was called to order by the President, Dr. J. B. Cowan, of Tullahoma, Tennessee.

Prayer was offered by the Rev. Charles Hyde.

The remainder of the first session was devoted to introductions, miscellaneous business, etc.

Afternoon Session.

Dr. W. P. McDonald, of Hill City, Tenn., contributed a paper entitled.

Report of a Case of Cancrum Oris or Gangrenous Stomatitis.

The patient, white, æt. 4 years. Dr. McDonald first saw the case on August 5. He found her with some fever, tongue coated brown, with red edges, surface more or less furrowed or full of cracks in the brown coat, her general appearance indicating a very low state of health. Her bowels were inclined to be too loose and her abdomen seemed to be somewhat distended—tympanitic. With these symptoms he pronounced the case one of typho-malarial fever. He began treatment by giving a mercurial purge, followed by large doses of quinine and bismuth. This treatment was continued for two days, after which he ordered ten drops of the syrup of iodide of iron after meals, also quinine and bismuth in small doses three or four times a day. This treatment was continued for about ten days, at the end of which time he found the patient had greatly improved.

Forteen days after seeing the child for the first time, he was called to see the mother, whom he found with nearly the same symptoms as the child first presented. During his absence from the city, another physician had treated an older daughter, whom he supposed had been troubled with the same disease. The child was still improving except complaining of a sore throat. On examination he found several small ulcers on the right side of the mouth with a general inflammatory appearance of the gums and the whole mucous lining of that side of the buccal cavity, with some bleeding from around the teeth. The trouble at first seemed to yield to a wash of chlorate of potassium and creosote, but on the 17th day of illness, the inflammation increased rapidly, the whole cheek and the side of the face appearing very much swollen, and the inside was fast becoming dark and gangrenous. August 24, a small dark spot about the size of a penny made its appearance externally, just at the right wing of the nose. This rapidly enlarged, involving the wing of the nose and in proportion the tissues on either side of the central spot, and on August

25, it had involved the right side of the nose up to the inner canthus of the eye, also the upper lip to the median line, and had spread rapidly on the cheek, reaching a point where the zygomatic muscles cross the superficial portion of the masseter. The teeth on this side became loose and dropped out, both above and below, indicating deep-seated trouble, possibly involving the maxillary bone.

Careful investigation revealed a strumous diathesis existing in the family, but no history of tuberculosis could be ascertained.

According to good authorities cancrum oris more frequently occurs as a sequel of other diseases than *per se.* The statistics of Rilliet and Barthez show that out of 98 cases of this disease, 41 were following measles; 5 scarlet fever; 6 whooping cough; 9 intermittent fever; 9 typhoid fever, and 7 mercurial salivation.

To draw a conclusion in the case by these statistics and by watching the case closely from the start, Dr. McDonald asks. "Did this occur as the sequel of the typho-malarial fever which I diagnosed (remembering the poor state of health the child was in to begin with)? Or was it the result of mercurial salivation produced by the mercury given at the beginning and followed two days after by the syrup of the iodide of iron?"

Dr. James E. Reeves, of Chattanooga, said the case was evidently one of gangrene, which is almost necessarily fatal.

President Cowan asked if the character of the disease might not have changed; to which Dr. Reeves replied that there was nothing impossible in medicine, and the disease might have changed.

Dr. E. T. Camp, of Gadsden, Alabama, once saw a case similar to the one reported, which he pronounced gangrena oris, the whole of one cheek being destroyed. There was evidence of mercury having been taken in the early part of the illness of the patient. The case terminated fatally within a few days. The patient was four or five years old and of the lower class. He thought the gangrene was the result of mercurial poisoning which was administered during the early part of the illness.

Dr. James E. Reeves, of Chattanooga, then contributed a paper entitled.

On All Sides a Learned Doctor.

The author introduced his subject by an earnest plea for higher medical education, stigmatizing cheap medical colleges, with no facilities for imparting instruction, as the greatest stumbling-blocks in the way of true progress.

He next paid his attention to the present tendency to make one-side physicians, and lamented that the department of gynæcology was overrun with cheap performers with the speculum, probe, dull curette, etc., and maintained that the specialist should build on the broad foundation of the general practitioner in order to reach professional eminence.

Evening Session.

Dr. Andrew Boyd, of Scottsboro, Alabama, read a paper on

Fracture at the Elbow Joint,

and reported cases.

He said after reduction there are but two methods of treatment of fracture at the elbow joint, viz., the extended or straight, and the flexed position. The author thinks the flexed position the better of the two, for the reason (1) that in all cases surgeons fear anchylosis, and it is much better to have a flexed anchylosed arm than a straight one. The comparative use in each is apparent. (2) When splints have remained twenty-five to thirty days, the arm is atrophied and helpless; it is, therefore, easier to overcome the flexor muscles than the extensors, and a patient can extend an arm with more ease than he can flex it.

Mr. Sydney B. Wright, of Chattanooga, read a paper on

Expert Testimony (see p. 383).

Dr. W. C. Bogart, of Chattanooga, reported a

Case of Neurosis

in a female, æt. 17 years. Examination revealed a coated tongue with a yellowish fur, fœtid breath, temperature 103°, pulse 115, bowels constipated and patient nervous. She had been growing more irritable, less communicative, suffering from sleeplessness, pain in the back of the head and a general depressed feeling for several months. She was placed under treatment and seemed to get along nicely. Six months later the patient was seized with convulsions and was treated therefor. Later she suffered from amenorrhœa.

An interesting feature in the case was that the patient passed three different and distinct kinds of worms —a small, black-headed worm, one-half inch long, which had a decided vermicular movement, another a pin-headed worm, and a third a small thread-like worm, two inches in length.

In the treatment Dr. Bogart resorted to nearly all the ordinary means, using the bromides, nerve tonics, anti-spasmodics, anti-periodics, anthelmintics, etc. At present she is taking a uterine tonic combined with a nerve tonic—avena sativa and the fluid extract of aletris. He uses the bromides with chloral at night to produce rest. The patient is also directed to take plenty of out-door exercise and is thoroughly rubbed night and morning over the spine. She is strictly prohibited from reading books or having them read to her, as she is exceedingly fond of literature.

Dr. W. S. Gahagan, of Chattanooga, read a paper (by title) on

Neuralgia.

October 15.—Second Day.—Morning Session.

The Association was called to order by the President at 9 a.m.

The first paper read was by Dr. J. C. Shepard, of Winchester, Tenn., entitled

A Few Remarks on the Fevers of Middle Tennessee and Their Treatment (see p. 405).

Dr. L. P. Barber, of Tracy City, Tenn., followed with a paper entitled

A Contribution to the Study of the Continued Fevers of the South,

in which he said the continued fevers of the South, their nosology and etiology, form a subject now justly attracting much attention, a subject upon which much is yet to be learned, and over which the medical world is considerably at variance. Only a close and accurate study of the disease by competent observers, in many and different localities, and a thoughtful comparison of these observations with free discussion will advance our knowledge of their nature, and shed light on the vexed question of its cause.

From the first days of his practice, this disease, so common to all parts of Tennessee and its adjoining states, had proved of great interest to him. Encouraged by the recent vigorous inquiry and research in this direction, he began some fifteen months since to keep a record of all fevers that occurred in his private practice, and the comparison of the cases, irrespective of their different designations, had helped him toward a decision as to the nosology of continued fever.

Dr. Barber then reported a large number of interesting cases, after which the two papers were discussed conjointly.

Dr. G. W. Drake, of Chattanooga, in opening the discussion, said that the human body is an aggregation of tissue cells, and that there are found among these cells, in various localities or tissues, certain loose cells, migratory, amoeboid, which he would call the police force intended to protect the tissues against the invasion of foreigners. When the foreigner which produces typhoid fever attacks Peyer's patches and the solitary glands, the migratory cells from all adjacent parts, and possibly distant, rush to the conflict. The result is great destruction of life of both microbes and phago cytes, and their putrefying remains produced typhotoxin and probably other alkaloids.

He believed typhoid fever to be produced by a germ once external to the body, but said a "judicious skepticism" was allowable as to whether Eberth's bacillus was the sole cause, and absolutely necessary to be present in all cases.

Dr. James E. Reeves said it was undoubtedly a fact that the malarial influence was slowly but surely traveling northward.

Dr. J. A. Long, of Long's Mills, Tenn., related his experience in McMinn County, Tenn. The fevers there had all the symptoms of typhoid fever. There were many non-typical cases. Some were cases of typhoid in a malarial diathesis. He believed that some cases of malarial fever continued because quinine was given in too small doses.

Dr. H. Berlin, of Chattanooga, presented some micro-photographs as an evidence of the existence of microbes in these fevers.

Dr. Geo. A. Baxter, of Chattanooga, suggested the use of salol and naphthol in the treatment of these fevers.

Dr. J. B. Murfree, of Murfreesboro, Tenn., thought it was impossible to have two fevers at once. He said there was no typho-malarial fever. We have mild cases of typhoid as well as of other fevers. The use of antiseptics is the proper method of treating typhoid, together with proper nutrition and stimulation.

Dr. Reeves asked Dr. Murfree if he thought typhoid was contagious.

Dr. Murfree said it was to a certain extent.

Dr. P. D. Sims, of Chattanooga.—Our fevers are not all either malarial or typhoid. We have another fever dependent upon filth. It may be called sewage or drainage fever. It is adynamic in type and is liable to take on most of the symptoms of specific typhoid fever. This is the fever now upon us, arising from the continued and increasing pollution of our water supply from sewage sources.

Dr. T. Y. Park, of Peavine, Ga., suggested that as these fevers presented the symptoms of both fevers, it was practical to use the term typho-malarial, as we can not make the public understand the technical points of difference, and we can not examine our cases for the micro-organisms.

Dr. Geo. A. Baxter, of Chattanooga, presented a paper on

Silicate of Soda, Some New Methods of Use in Surgery.

The paper chiefly had reference to silicate jackets made by a new process of hardening the silicate, which it is claimed is an improvement on all other jackets, inclusive of the plaster-of-Paris, woven wire, or watch-spring now in use for the treatment of spinal injuries or disease. It is lighter, equally durable, equally immobile when on, and capable of removal at any time, and of adjustment to any lateral pressure desired.

Afternoon Session.

The Association was called to order at 2 P.M. by the President.

Dr. Richard Douglas, of Nashville, Tenn., contributed a paper on

Abscess of the Liver.

He said that abscess of this organ is the result of absorption of some morbid product from the intestine, or from some ulcerated surface. The bacteria enter the circulation and are deposited in the liver, where abscess is formed. This may be with a normal temperature.

Case.—Four months after an attack of typhoid, the patient had a chill, slight pyrexia, a trace of jaundice, this lasting only a few days. There was a globular swelling in the right hypochondriac region. The only symptoms were a dull, heavy pain and tenderness. No general local disturbance. Diagnosis confirmed by

aspiration. A free incision let out eight ounces of inodorous pus. Recovery in four weeks. In these cases the adhesions are diagnosed by palpation. When pus is detected it should be evacuated at once. Bleeding per aspiration-needle or leeches applied to the abdomen he considers useful, although there is some risk attending aspiration.

Dr. G. W. Drake said that phagocytosis may furnish an explanation of the occurrence of abscesses in the various tissues and organs of the body, including the liver. The abscess may be a circumscribed locality in which was waged the hardest fought battles between the phagocytes and microbes, containing the disorganized remains of the slain together with the products of decomposing tissue cells and microbes, under the dominion of chemical force, the flow of nerve force into the contents of the pus cavity being interrupted, or the nerve force transmuted into chemical force, if the doctrine of correlation of physical force may be extended to include nerve force.

Dr. E. E. Kerr, of Chattanooga, reported a

Case of Gall Stones.

Dr J. B. Murfree, of Murfreesboro, Tenn., read a paper on

Uterine Fibroma.

He said a uterine fibroma is a morbid growth developed within the walls of the uterus, and is composed of muscular fibro-plastic material and cellular tissue, and is due to a perversion of nutrition. It is non-malignant and homologous in its structure. Pain, hæmorrhage, rectal and cystic irritations, indigestion, dropsy and exhaustion are some of its results. They threaten life by hæmorrhage, inflammation, septicæmia and pressure.

The treatment is divided into four methods: (1) Symptomatic. (2) General (by medicines). (3) Electrolysis. (4) Surgical.

By the first method we simply treat the symptoms as they arise and ward off threatened dangers. Hæmorrhage is the most troublesome symptom and is best treated by quietude, opiates, etc. The hot douche and the tampon are useful.

The general treatment is by the administration of medicines to cause the absorption or destruction of the tumors. Medicines are powerless to cause the absorption of a fibrous tumor and they do no good, except to build up the general system. Ergot is given to cause the death and expulsion of the tumor. Dr. Murfree had no confidence in ergot for this purpose.

The treatment by electrolysis has met with some success and is worthy of trial. It is especially adapted to the interstitial variety.

Surgical treatment is most usually resorted to for the permanent relief of uterine fibroma. It consists in the removal of the tumor by traction, torsion, enucleation, excision, ecrassement and hysterectomy. When the tumor projects into the uterine cavity it is best removed by excision. When it is interstitial it should be treated by electricity. When sub-peritoneal it had better be let alone unless the woman's life is a burden and death is threatening, when it should be removed through a laparotomy or by hysterectomy. Hysterectomy should never be resorted to as an ideal operation, but only as a forlorn hope. But conditions do arise when it is eminently proper and should unhesitatingly be performed.

Dr. Wm. H. Wathen, of Louisville, Ky., said the more frequently he goes into the pelvis the more often does he find that his diagnosis is not the same as it was before he had operated.

Apostoli's method he considered dangerous in private practice. To be successful one must be one of the most exclusive specialists. The tumor may be lessened in size, but there were, as far as he knew, no cures. A fibroma should not be interfered with unless it gives trouble.

Dr. Richard Douglas wished to emphasize what Dr. Wathen had said regarding Apostoli's treatment. From observation at his clinics and enquiries in the hospitals in Paris, he had not found any cases that were cured, but he had heard of two cases that died as the result of the treatment, one of them being in the practice of Dr. Keith, of London.

Dr. L. P. Barber, of Tracy City, Tenn., said that Apostoli's method was certainly of great promise, notwithstanding the remarks of Drs. Douglas and Wathen. He saw something of the results of the treatment during the past summer, and he had the following results from his friend, Dr. Franklin H. Martin, of Chicago. Of 200 cases, 3 only had received no benefit. About 14% received some benefit for a time, but this finally ceased. Eighty-four per cent were symptomatically cured, with a number of cases of actual cures. Dr. Martin has had no deaths in all his experience with electricity. As compared with the results of hysterectomy and the use of the knife generally; the result, to the unprejudiced, Dr. Barber thinks, is certainly in favor of the use of electricity in the right hands.

Dr. Murfree, in closing, said he felt that much could be accomplished by Apostoli's method.

Dr. Wm. H. Wathen followed with a paper entitled

Laparotomy Versus Electricity in Ectopic Pregnancy.

He said that electricity, the only feticidal means now recognized as orthodox by physicians who practice destroying the life of the fœtus in ectopic pregnancy without laparotomy, is no longer used for this purpose where the pregnaney has continued beyond 3½ or 4 months, and is seldom used after the third month. At this time the fœtus cannot be killed except by electro-puncture, and the complications and the deaths consequent upon this practice have been so numerous that the most radical advocates of electricity are afraid to introduce the electrodes into the gestation sac. The use of eleetricity in extra-uterine pregnancy is practically confined to the United States, and while it is advocated by men of

recognized ability and learning in obstetrics and gynæcology, he was constrained to believe that very soon it will have no support.

Dr. Wathen here entered into an argument in favor of laparotomy, for the difficulty and sometimes the impossibility of diagnosticating extra-uterine pregnancy in the early months is so manifest to experienced physicians, that it would be ridiculous to claim that in all these cases pregnancy existed; while in the cases where laparotomy is done a diagnosis may positively be made by seeing the embryo or the chorionic or placental villi. If the embryo or fœtus in an extra-uterine pregnancy is killed by electricity, a more or less diseased condition of the plevic structures is left, that endangers the health or life of the woman; the dangers usually being increased as pregnancy advances. But if a laparotomy is done there is no obstructed tube, or other pathological condition left, and if the woman recovers from the immediate effects of the operation she is entirely cured. Her life is no longer in jeopardy because of the danger of pelvic abscess, sepsis, or exhaustion following an effort to discharge the suppurating contents of the gestation sac through fistulous tracts in the rectum, vagina, bladder, or through the abdominal walls. If we could eliminate the cases where there was an error in diagnosis we would find that the mortality from the use of electricity and the bad after results are far in excess of what follows laparotomy in the practice of experienced operators.

EVENING SESSION.

The Association met in Stone Church, and was called to order at 7:30 P.M.

DR. G. W. DRAKE, delivered an

ADDRESS OF WELCOME,

which was responded to by Dr. G. C. Savage, of Nashville.

Then followed the President's Address entitled

THE DOCTOR.

He said the man that starts out to be a doctor must understand that it is a life of toil. There is no flowery way to the royal degree of excellence. The laggard, the indolent, the careless never enter the temple of fame. The sluggard never tastes of the royal feast spread for the earnest, industrious worker. He knows nothing of the grandeur of mental comprehension of the real medical scholar. The doctor nust be educated, not as that term seems to be understood in these days. Modern education, Dr. Cowan feared, was too much a process of stuffing and cramming. The word education meant more than this. To educate was to draw out, to enlarge, to expand, to develop, and to strengthen.

[TO BE CONTINUED.]

STANLEY'S recent Emin expedition was equipped entirely with Fairchild's digestive ferments in preference to any others, and in the recent attack of gastritis from which Mr. Stanley suffered, he was entirely sustained upon foods previously digested with Fairchild's extractum pancreatis.

SELECTIONS.

ELIGIBLE VEHICLES FOR QUININE.

Doubtless every pharmacist and physician has his favorite method of disguising the taste of unpalatable drugs; but not everyone is aware that the enterprise of manufacturing pharmacists now offers such a variety of vehicles from which to choose.

Some rely almost exclusively on pills and capsules, whereby the drug is smuggled into the stomach without recognition by the gustatory nerves. But there are patients whose apparatus for deglutition is so constructed as to render it almost impossible for them to swallow pills or capsules as well as cases where it is all important to secure immediate absorption of the medicine. When given in pill form, no matter how soluble the mass, an appreciable time must elapse before the remedy begins to have its effect.

How then can we administer quinine in solution or suspension—particularly to children or delicate ladies—without causing a disturbance in the family every time a dose has to be given? To children quinine may often be given advantageously by inunction, and the oleate of quinine especially, applied to the surface in this way, is readily absorbed and produces promptly the characteristic effect of the drug. Suppositories must not be forgotten in cases where the stomach is particularly irritable, and the hypodermic injection presents itself as a *dernier ressort* when a prompt and powerful influence is required. But in ordinary cases quinine may be administered by the mouth.

One plan is to mix the quinine with some alkali or astringent so that the bitter sulphate or muriate becomes converted into the tasteless alkaloid or tannate.

Another plan is to combine with the quinine a mixture having a bitterness of its own, which shall blend with and modify the intolerable bitterness of the quinine, some aromatic being generally added to still further disguise the objectionable taste.

It is on this principle that cascara cordial operates, and many of those who have tried this vehicle declare that it is the best that has yet been offered. The especial advantage which it possesses over all others is the fact that it is a laxative agent, and so renders more efficient the action of the antiperiodic.

Licorice has been long known as having a remarkable power of covering the taste of bitter medicines. This property is due to a peculiar principle called glycyrrhizin, a glucoside, insoluble in water and in acid solutions, but readily dissolved by the aid of alkalies.

Where quinine is given in powders, it may be rendered nearly tasteless by simply rubbing it up with a small quantity (one fourth its weight) of ammoniated glycyrrhizin (ammonium glycyrrhizate.)

"Fluid extract licorice, for quinine mixture," is one of the most efficient of all the preparations employed for covering the bitter taste of quinine. The best way to use it is to drop a dose of the powder into a little of the

fluid extract contained in a spoon, mix it thoroughly and swallow at once.

Aromatic elixir of licorice is to be used in the same way as the fluid extract, but is especially useful in the drug store, when a single dose of quinine is called for to be taken at once.

Yerba santa contains a principle analogous to glycyrrhizin, which renders quinine in its presence as tasteless as starch. It appeared to act like glycyrrhizin by producing a peculiar impression upon the gustatory nerves; it does not, as stated by some, produce with the quinine an insoluble compound. Unless the mouth is thoroughly rinsed after taking the mixture, a bitter taste will gradually develop as the nerves recover from the influence of the yerba santa.

To some persons the taste of yerba sonta itself is disagreeable, and when this is the case licorice is to be preferred. Barring, however, idiosyncrasy in this respect, we can recommend the preparations of yerba santa as the best means of rendering quinine tasteless. Aromatic syrup of yerba santa renders it possible to give little children full doses of quinine without the vigorous remonstrances which physicians and parents have learned to regard as inevitable.—*Northwestern Pharmacist.*

ARISTOL.

Although aristol has been in the hands of the profession such a comparatively short time, an extensive series of publications of experience of its use has appeared, which, for the most part, quite confirms the very favorable results recorded by Eichhoff of its use. Dr. Brocq reports a remarkable case which he presented to the Societe Medicale des Hospitaux—a patient suffering from extensive superficial epithelioma of the face, extending from the level of the mouth to the orbit, the lower eyelid being completely destroyed. The healing action in this case was at once evident, and in five or six days the wound was becoming covered with a firm cicatrix, and at the time the patient was presented to the society, after use of the remedy for three weeks, only very small wounds remained. Dr. Brocq has also had most gratifying results in other cases in which he has used the drug, especially ulcers of the legs and ulcerated gummata, aristol far exceeded that with the other drugs. In all his cases the marked property of the drug in favoring cicatrization was most striking. Dr. Gaudin applied the drug either dissolved in ether or collodion, or as a dusting powder.

Dr. Hughes has found the drug of much service in all those forms of rhinitis associated with a dryness of the mucous surface, or in which there is a tendency for the secretion to undergo decomposition. He reports 21 cases in which he has tried the remedy, and in all the result was most satisfactory; in two cases of specific ozæna the disappearance of the fetor and the healing was very rapid.

Dr. Lowenstein has treated four cases of ozæna with the drug, and reports most favorably on its effect in one case of specific ozæna. In addition to insufflation of the drug in powder, he painted the ulcerated parts with a solution in collodion flexile. He speaks very favorably of the property the drug has of forming a covering over the diseased surface.

Dr. Von Swiecicki has made a trial of the drug in gynæcological practice. He has used aristol in 20 cases, and in all the drug has had a beneficial action. The cases reported comprise endometritis, hyperplasia of the cervix, parametritis, eczema vulvæ, and, after operation for fissure of the cervix, applied as a dusting powder.—*Med. Chron.*

THE SALIENT POINTS IN APPENDICITIS—ITS DIAGNOSIS AND TREATMENT.

This was the subject of a paper read before the Virginia Medical Society, by Dr. Joseph Hoffman, of Philadelphia, Pa.

The cæcum hangs more or less free in the abdomen, and hence has considerable latitude as to motion; while the appendix varies in position according to the movement of the cæcum. There is frequently a dependent pouch between the mesentery of the appendix and the ileum, consisting of folds of peritoneum, which from pressure of the rotation of the cæcum, becomes congested or atrophied, and is thrown into a band, in either way becoming a source of danger to near-lying intestines, either as a strangulating cord, or as a ring through which a fold of intestine may fall, and be choked in the hernial fashion. Thus, it is evident that a purely physiological rotation of the cæcum may bring on a pathological congestion, without the presence of any irritating matter whatever. But keep in mind that, although the position of the appendix is variable, it is not abnormal, but depends entirely upon the rotary movements above referred to of the cæcum. This fact will be useful in determining approximately the position of the appendix, and thus shorten the operation, and prevent unnecessary handling of the intestines. As to treatment, surgeons are divided into three classes:

1. Those who operate at once upon the occurrence of induration, pain and high temperature.

2. Those who wait, on the ground that a great majority recover under rest and opium.

3. Those who operate between attacks, or who wait for recurrence.

This last class represents the progressive surgery of to-day, and includes such surgeons as Senn and Treves. But of course individual surroundings must have their due weight in determining when to operate. As to the plan of operation, be led by the principles of abdominal, not general surgery. Mr. Treves, Dr. Homans, etc., are wrong in condemning the drainage tube, as the results of Tait and hundreds of other abdominal surgeons prove. In women, in general terms, the best advice is to cut through the median line; for the chances are that

in women, the disease will not be found to be appendicitis; although, if needed, this incision has advantages anyhow. As to diagnosis, exploratory incisions are resorted to, often when symptoms point to the presence of pus; but Dr. Hoffman thinks they should be condemned. In men, the presence of an indurated mass in the right iliac fossa, with detection of pain and fullness in the region by rectal examination is important. The right leg is often drawn up.—*Virginia Med. Monthly.*

A Few Corn Cures.—H. M. Whelpley, M.D., Ph. G., in *Notes on New Remedies*: Probably the most popular corn cures depend on the action of salicylic acid. Among the many therapeutic properties of this comparatively new remedy is its power to disintegrate epithelial tissue. It is usually combined with cannabis Indica. The form I have found useful is to mix nine parts of salicylic acid with one part of extract of cannabis Indica and forty eight parts of collodion. This is applied to the corn every night with a camel's hair brush. The foot should be clean before it is applied, and the mixture permitted to thoroughly dry before it comes in contact with clothing.

A salicylic acid corn plaster is made by melting six parts of resin, and adding five parts of balsam of fir, and then stirring in ten parts of salicylic acid as it cools. This can be spread on any suitable medium for a plaster. When used, the corn must not be rubbed with the shoe.

Lanolin forms the basis of another salicylic acid plaster, and cocaine is added with the idea of making it painless. To form the plaster, mix six drachms of salicylic acid thoroughly with ten drachms of lanolin. Dissolve five grains of hydrochlorate of cocaine in a small quantity of warm alcohol; and mix the solution with one fluid ounce of creosote. Mix one-half ounce of melted white wax with one-half ounce of vaseline and add the creosote solution. To this add the cocaine solution and mix.—*Ther. Analyst.*

The Queen Pays all Expenses.—*The Queen's* last "Free Trip to Europe," having excited such universal interest, the publishers of that popular magazine offer another and $200 for expenses to the person sending them the largest list of English words constructed from letters contained in three words "British North America." Additional prizes consisting of silver tea sets, china dinner sets, gold watches, French music boxes, portiere curtains, silk dresses, mantel clocks, and many other useful and valuable articles will also be awarded in order of merit. A special prize of a seal skin jacket to the lady, and a handsome Shetland pony to the girl or boy (delivered free in Canada or United States) sending the largest lists. Every one sending a list of not less than twenty words will receive a present. Send six U. S. 2c. stamps for complete rules, illustrated catalogue of prizes, and sample number of *The Queen.* Address *The Canadian Queen*, Toronto, Canada.

USEFUL FORMULÆ.

Dysmenorrhœa.—A noted physician recommends the following:

℞ Pulv. camphoræ, - - - gr.x.
Pulv. Doveri, - - - - gr.xx.
Ext. hyoscyami, - - - gr.x.
M. Ft., pil. x.
Sig.: Two pills every two hours till pain ceases.—*Can. Lancet.*

Chronic Rheumatism.—

℞ Iodide potassum,
Salicin, - - - - - aa ʒij.
Fl. ext. manaca, - - - - flʒij.
Tinc. Cimicifuga, - - - - ʒj.
Lithiated hydrangea, - q.s. ad. ℥iv.
M. Dose.: Teaspoonful every three or four hours, according to urgency of case, in milk, mucilage or sweetened water.

An Injection Against Leucorrhœa and Blenorrhœa in Women. (Lutaud).—

℞ Creolin, - - - - gtt. xxx.
Ext. fluid hydr. canad., - - fl.ʒijss.
S.: Two teaspoonfuls in a pint of warm water to be used at one injection.

As a urethral injection the following formula is used:

℞ Ext. fluid hydrast. canad., - gtt.xxx.
Creolin, - - - - - gtt.x.
Aquæ, - - - - fl.℥viij.
Sig.: Use pure as a urethral injection.—*Jour. de Med. de Paris.*

Persistent Dandruff.—Mr. Stephen, writing to the *Lancet*, says the following is very useful in persistent dandruff:

℞ Resoacini,
Ol. alivarum,
Ætheris sulph., - - - aa ℈iij.
Spt. vini. rect., - - - - ℥vjss.
To be well shaken, and applied to the scalp by a bristle brush about twice as large as the ordinary mucilage brush, by insinuating it with the locks of hair. The head to be well washed with soap and warm water twice a week.

For Psoriasis.—Mr. Jonathan Hutchinson's favorite prescription for psoariasis is (*Archiv. of Surg.*):

℞ Acid. chrysophanic., - - grs. x.
Liquor. carbonis detergent., - ♏ x.
Hydrargyri am. chlorid., - grs. x.
Adipis benzoat., - - - ℥j.—M.
Fiat unguentum.

At night the patient should wash the diseased surfaces free from all scales; then, standing before a fire, rub on the ointment, devoting, if possible, half an hour to the operation.

Mr. Hutchinson somewhat doubtfully prescribes arsenic internally along with the above.

ORIGINAL ARTICLES.

THE PRESENT STATUS OF THE TUBERCULOSIS QUESTION.

BY LUDWIG BREMER, M.D.,

Professor at the Missouri Medical College, St. Louis.

Abstract of a paper read before the Missouri Medical College Alumni Association, November 20, 1890.

Now that the long sought-for and often despaired of remedy for tuberculosis seems to have been placed within the grasp of the medical profession, and hat Virchow's postulate, that it was the task of humanity to conquer consumption—as scurvy, the former bane of civilization, had been eradicated before—seems to be passing into a state of actuality, it is perhaps not amiss to look backward and pass in review the principal phases of the all-important question of tuberculosis, its causes, nature and treatment.

Tuberculosis is a curable disease, and, as some will have it, an eminently curable one, judging from the large number of individuals in whose lungs those scars were found after death; but what was in reality the healing agent, was a mystery. Certainly there was no specific for the disease, and since it would occasionally get well under the most diversified treatment, and on diametrically opposite plans, it stands to reason that very often tubercular patients recovered spite of treatment. Medical nihilism, whose era had been so effectively and disastrously inaugurated by the Vienna school, was reigning supreme, when the discovery of the cause of uberculosis, in the shape of the well-known bacillus, was made by the man who is now the central figure of our profession. This establishment of the cause naturally gave a new and powerful impetus to therapeutical efforts. The old stereotyped precepts for consumptives—plenty of fresh air, lung gymnastics and a nutritious diet—were looked upon as hackneyed and obsolete dicta of old fogies, because they had most signally failed in the vast majority, nay, in almost all the cases in which this line of treatment had been followed. After all, even where the improvement seemed to be the most marked, the inexorable tubercle triumphed over air, exercise and food. There was, consequently, a wild rush of experimenters for that parasiticide which would kill the specific microbe without injuring its host. Many were the drugs that were tested for their anti-bacillary action on artificial cultures, and there is no microbe whose destructibility chemical means was investigated by so vast, so competent and indefatigable an army of medical men as the tubercle bacillus. One by one the known anti-parasitic agents, after their efficacy had been demonstrated in the test-tube, were tried on tubercular patients, and every one of them was found wanting. The unlimited enthusiasm which, successively, various mercurial salts, creosote, iodoform, terebene, Peru balsam and the rest of the list, aroused among the sanguine in the profession, gave way, after a while, to despair and apathy. The brilliant results obtained by some were flatly contradicted and disproved by the experiments of others working with the same remedies under the same conditions. What wonder, then, the old plan of treating the consumptive threatened to gain the ascendency once more, that plan which consists in deluding the patient by amusing him with nugatory remedies and keeping up his spirits and his hopefulness until he dies.

After it had become plain to all impartial observers that all the parasiticides, if they had done any good at all, had benefited the patient in other than anti-bacterial ways—that arsenic, for instance, was of use as a stomachic, that creosote owed its favorable action to the influence it exerted over the catarrh, which so often complicates lung tuberculosis, but which has etiologically nothing to do with the original disease (it being a pneumococcus infection); a number of physical methods were invented and tried, each inventor claiming for his apparatus superiority over all others. Nothing, perhaps, demonstrated human inability, to successfully grapple with its dire enemies more plainly than this diversity and multiplicity of contrivances devised for the cure of consumption. Thus Bergeon's method, with its finely elaborated flasks, the costly oxygen generators, the hot *dry* air and hot *moist* air machines, the carbonic acid producers, and many other absurdities had their periods of rise, triumph and collapse. The only ones benefited by these devices were the inventor's, instrument makers and such of the doctors as appreciated the maxim to take time by the forelock and make hay as long as the sun shines.

Nothing, indeed, seemed absurd enough to preclude the possibility of finding adherents, and we have no reason to smile at the childish superstition of former generations that believe in the cow-stable cure and the efficacy of warm ox-blood.

Is it then to be wondered at that skepticism on all matters pertaining to the curative methods of tuberculosis became once more the predominating trend of mind in the medical profession? Such sketicism was, indeed, justified not only by the negative results of the multifarious anti-consumptive methods of treatment, but also by the nature of the disease, as it was generally understood at that time.

After Koch had demonstrated that a bacillus of a constant form, endowed with certain life properties, occurred in all cases of tuberculosis, and that this bacterium, when obtained in a state of pure culture, even through a number of generations, had the same invariable effect on certain animals, setting up typical tuberculous lesions, in which again the same micro-organism, the tubercle bacillus, could be demonstrated, the chain of evidence in favor of the infectious nature of the disease seemed to be complete, no link missing.

But although the pathologists all over the world, with

very few exceptions, declared themselves in accord with the doctrine established by Koch, many clinicians either ignored or contradicted the propriety of applying experimental results obtained in animals to the disease as met with in man. Many, indeed, were the howls of ridicule that were poured out on the unfortunate heads of bacteriologists and their followers. A voluminous humoristic literature sprang up, devoted to the description and derision of the shapes and actions of the microbes.

Aside from the guerrilla warfare against the microbian doctrine, a fierce contest was carried on with the ponderous weapons of experiments in the ranks of competent workers. Nothing could illustrate the difference between the physician of our times and that of the past more vividly than this war of investigators. Whilst medical discussions formerly were conducted on the principles of dialectics, and the contestants used to hurl philosophic arguments at each other's heads, our modern physicians, true to the requirements of medicine as a branch of the natural sciences, fought each other, not with arguments, but with experiments.

This war, which is still going on, is in the first line above the relative importance of the tubercle bacillus, whose existence and diagnostic importance nobody seriously disputes any longer, and the nature of the soil in the animal organism in which it grows; in other words, about the question: Which is the prime factor in the production of the disease, the tubercle bacillus or the predisposition to tuberculosis?

In order to understand correctly the position of the two antagonistic factions, the infectionists and the constitutionalists, it is of importance to clearly point out what is meant by predisposition.

Under the leadership of Rokistansky, medical men had become accustomed to speak of the "phthisical habitus." This is the condition characterized by what is termed a paralytic thorax, a thorax whose longitudinal axis is increased at the expense of its antero posterior diameter, in consequence of which the inter-costal spaces are unduly widened. Persons having the phthisical habitus are, furthermore, distinguished from the normal by a small heart and voluminous lung. They have been poor eaters all their lifetime; their powers of assimilation have always been below par, and a tendency to catarrhal affections has been manifest ever since their childhood. Having escaped consumption in their infancy or at puberty, they are very apt to acquire and die from tuberculosis in the twenties. There is a want of resisting power to injurious influences, but especially to the invasion of the ubiquitous tubercle bacillus which abounds in the atmospheric air wherever there are consumptives, who will spit on the floor or on their handkerchiefs. The dried sputa will be pulverized by various agencies, and desseminated through the atmosphere, with which we all inhale these pathogenic germs, some, the predisposed, contracting the disease, while others, possessing the normal power of resistance, escape the injurious effects of such inhalations.

Such a predisposition is in most instances transmitted by heredity from parent to child.

The question now arises, is this particular conformation of certain organs a simple anatomical and physiological anomaly which, owing to an inherent weakness of certain organs, notably the lungs, and, above all, on account of a chemical abnormality of the tissues and fluids of the body, favor the development and colonization of the specific micro-organisms of tuberculosis after they have once gained access to the interior of the body, or is what is generally called predisposition, already a form of tubercular disease, transmitted with the ovum and kept for some reasons or other in abeyance, until from a latent form it develops into outspoken and unmistakable consumption?

And again, what does scrofula, so closely allied with consumption, mean? Is it simply a condition, an anomaly of constitution, as some have it, or is it a disease, a mitigated form of tuberculosis?

When we assume that the tubercular predisposition and scrofulosis denote only a constitutional anomaly which favors the invasion of the tubercle bacillus, and if, in addition to this, we adopt Mestchhikoff's theory, according to which in bodies built after the type called phthisical habitus, there is an inherent weakness of the leucocytes to destroy—i. e., to digest the bacteria productive of phthisis, its seems intelligible enough that many escape the disease that are placed under the same morbific surrounding to which others succumb. No theory, indeed, is more captivating and appeals more strongly to our understanding than this theory of phagocytism, introduced into the pathogenesis of infectious diseases by the Russian investigator. Even those not grounded in biology and pathology will find it quite easy of comprehension that the white blood corpuscles, resembling so closely in all respects the amœba, should, like this, unicellular animal, embrace—i. e., eat smaller organisms than itself, and digest them. The foreign invaders, the bacteria, are hunted up, as it were, by the soldiers, the white blood-corpuscles, swarming throughout the animal organism, swallowing every bacterium they may come in contact with. On the aggressiveness and digestive powers of the leucocytes the fate of the whole organism depends, in case of such inimical invasion. If they triumph in the struggle with the enemy the host is saved, the intruders vanquished—i. e., disease is prevented. In other words, immunity from tubercular disease is due to the ability of the leucocytes to attack, swallow and digest the otherwise pathogenic bacteria.

If the experiments of Metschnikoff, upon which the theory of phagocytism has been based, had been verified by other competent observers, the problem of immunity would be solved, and we could easily understand how some persons, though constantly inhaling tubercle bacilli, which of necessity must abound in places where phthisical patients dwell, will escape infection, while others succumb to bacterial invasion.

But quite a number of reliable investigators have repeated Metschnikoff's experiments and have come to the

conclusion that it is not the microbe-killing activity of the leucocytes which confers immunity on the organism, but the biochemical properties of the tissue fields and of the blood-plasms, which do not offer the conditions necessary for the development and proliferation of the microbe, and which even possesses direct and active parasiticide qualities.

I have myself made a few experiments on the frog upon which Metschnikoff's theory of phagocytism is based and have come to conclusions unfavorable to that investigator's views.

But has it been proven at all that tuberculosis in man is an infectious disease? Is there evidence that the disease has been communicated from one individual to another? And the tuberculosis of animals being identical to that of man, at least in an etiological sense, are there examples on record that the infection spread from animal to man, and vice versa?

Both questions can be answered in the affirmative. One powerful objection, however, outweighing a number of others, has from the beginning been raised against the conclusiveness of the inoculation experiments made on animals, to-wit: that in no animal had there ever been produced a disease which was identical to or even resembling the form of phthisis ordinarily met with in man; it was urged that artificial animal tuberculosis was an acute infection of rapid course, with no shade of a likeness to the clinical picture which we are wont to observe in man. Again, it was hard to believe that lupus, tuberculous ulcers, fungous synovitides, cheesy pnemonia, and miliary tuberculosis, should all represent pathologico-anatomical varieties of the same affection, although in all of them the tubercle bacillus was found. It seemed to be incredible that into the one word, "tuberculosis," should be crowded a variety of affections which clinically offered so many distinctive characteristics, that so great a number of the most different morbid entities should all at once come under the common head of tuberculosis disease. A special difficulty to accepting such a view was presented by the totally differing clinical aspect of lupus and what is ordinarily called tuberculosis of the skin. In spite of the many efforts at elucidating these vexed questions, we are, as yet far removed from a satisfactory soiution of the problem.

The question as to the real meaning of the term tuberculous predisposition is also in a better way of becoming clearly defined. It must be confessed that it is only a make-shift, an invention to hide our ignorance It either means, as explained above, a want of leucocyte activity or a biochemical state of the fluids of the body on the one hand, or, as some authorities have it, is a modified tuberculosis itself. Hence the person who is of the phthisical habitus is not threatened with consumption but has it already in a mitigated form.

The congenital nature of the trouble and the direct transmission of the disease itself in a modified form becomes more easily intelligible when we consider the now well-authenticated fact that in the seminal fluid of consumptives sometimes tubercle bacilli are met with without there being any organic or distinctive disease. We must assume in such cases that the pathogenic germ has found access to the seminal tubes by means of the blood current. Why it has not set up any morbid action in those parts it is hard to understand. But it is conceivable that being present in the seminal fluid it may find its way into the ovum with the same facility as the spermatozoa, while on the other hand it may invade the ovum while still in the ovary. In order to verify this assumption experiments of embryonal infection were made by Maffucci, who found that the tubercle bacillus, like other kinds of microbes, can be transferred to the fertilized ovum without in the least interfering with its development. He found that the fertilized and incubated hen's egg was a soil favorable to the tubercle bacillus derived from a tuberculous hen. It did not multiply during the embryonal state of the chick, but developed in the post embryonic, a later period, in a manner characteristic of chicken tuberculosis. This highly interesting experiment tends to show that something similar may take place in the human ovum. If this is the case, a vere serious impediment supposed to exist by many to the cure of tuberculosis would be removed, the diathesis would become a matter of comparatively little consideration. Hitherto the cool observer of all anti-tubercular therapeusis would invariably wind up his arguments against the possibility of a cure by saying: You may kill the bacteria and do away with their pathological products, but you cannot change the constitution of the tubercular, and even when freed temporarily of the pathological germ he will retain the predisposition to a new infection. But if it should be true that what we now call the phthisical habitus should be the disease itself, and if a specific remedy for the latter should really exist, the chances of doing away with the morbid condition would, to my mind, be favorable to the patient. Supposing the preceding to conform to the actual state of things, it must be admitted that that percentage of persons who, in spite of their phthisical habitus, attained to old age, were in reality cured of their tuberculosis.

But this is a theory which still awaits further experiments and observations to rise to the dignity of a fact. However conceivable the latent tubercular parasitism may be in the offspring of the phthisical, it must be admitted that on equally probable grounds can the mortality of the members of a phthisical family be explained when we still cling to the undefinable something, the tubercular diathesis or predisposition. The children living in intimacy with their diseased parents, and being constitutionally susceptible to the virus, acquire the disease by contagion. Whether that form of scrofula which is found in the offspring of tertiary syphilitics, cancerous, broken-down alcoholics and of decrepit old persons, offers the same or less chances to a favorable bacillary invasion than that condition generally termed scrofulosis (granting for the sake of argument that it is nothing more than a constitutional anomaly), is a question hard to decide.

But whether such a thing as a diathesis is a reality or only a product of scientific fancy, we do know that tuberculosis is an infectious disease, and that persens who come of absolutely healthy stock may acquire it in some form or another. That a remedy should have been found for such cases seems not improbable.

It may still be said that in order to eradicate tuberculosis, you have at first to do away with the crowded tenement houses, the damp rooms and cellars, the unhealthy factories, the insufficient and unwholesome food; in fact the whole train of social misery which forms the dark side of our civilization. The bad habits, the unbridled appetites, the irrational modes of living of the better situated, are also to be considered. All these are certainly the powerful allies of the enemy, the germ of tuberculosis, and it is not probable that they will ever disappear from the globe.

But, in spite of these discouraging aspects of the question of a cure for tuberculosis, and the limits drawn by the nature of the disease for any and every plan or remedy, let us hope that the glad tidings coming from Berlin will stand the test of time.

As coming great events always throw their shadows before, so the substitution of a radical for the symptomatic treatment has been, so to say, in the atmosphere in recent times. The experiments conducted by a whole array of earnest workers toward studying the conditions and laws of immunity, the preparation of animal alkaloids, the immense strides which organic chemistry has made of late, all these factors have probably contributed to bring about the solution of one of the greatest problems in practical medicine. What but a short time ago would have seemed the wild fancies of a disordered brain, has now become a tangible reality.

Of course there will be disappointments, there will be reaction; no remedy is infallible. But that a new epoch is dawning on our science there can be no reasonable doubt.

Let us hope that the expectations of the civilized world may be realized, for the benefit of the suffering, the honor of the modest savant of Berlin, and the good of our glorious profession.

A STUDY OF DR. KOCH'S DISCOVERIES.

BY JOHN AULDE, M.D., PHILADELPHIA.

Advance proof from the Medical Summary, for December, 1890.

The result of Prof. Koch's discoveries, so far as we are able to understand them on this side of the Atlantic, promises to revolutionize the practice of medicine, at least in the treatment of diseases depending upon the presence of a micro-organism. Notwithstanding that these investigations have been going on for some time, no one outside of his immediate associates seems to have any very definite ideas as to the method pursued in the preparation of the medicaments used. From the report which he has just published, nothing can be learned as to the secret, and for the present all liquids for inoculation will have to be obtained from Berlin. While this may be useful as a precautionary measure, and may serve to prevent the illegitimate uses which followed the announcement of Bergeon's gas, and Brown-Sequard's fluid, it is not at all to the liking of many scientific men in this country. Still, we are scarcely warranted in entering a complaint against the discoverer, because the establishment of the correct principles upon which the cures depend is more to be desired than the immediate and wholesale practice which would follow the exact announcement of the methods.

So far as we can udge from the reports, the results in the practice of quite a number of physicians in Berlin would lead us to believe that a specific has been found which will arrest the progress of consumption, and that for all practical purposes those submitting to this treatment, even in advanced stages of the disease, may expect to be relieved from the immediate consequences of the affection. Whether it will be a guard against an attack at some future time, the promoters are not prepared to say; but from our knowledge of the etiology, and the relations which the bacilli bear to it, there is no assurance that it will enact the role of vaccination as practiced for the prevention of small-pox. The remedy merely presents to the affected tissues a poison, probably in the shape of a ferment, which has a fatal effect upon the bacilli; the result of this action is that the diseased structures undergo a retrograde metamorphosis, necrosis takes place, and that portion which is not eliminated by expectoration is rapidly absorbed and thrown off through the usual channels. Where the disease affects joints, for instance, massage is recommended for the purpose of assisting nature in getting these objectionable products into the blood-current.

In the treatment of lupus and lupoid ulcerations the action of the remedy may be observed from day to day, and in this disease the descriptions are exceedingly interesting and will be useful in enabling us to estimate the peculiar powers which it possesses. No physician can study the account published by Prof. Koch without a feeling of wonder and admiration, owing to the clearness of the evidence, the multiplicity of facts adduced, together with the well-known scientific character of the work previously performed by this celebrated *savant.*

It would be idle to speculate upon the character of Prof. Koch's medicament, but it will not be out of place to call attention to some investigatons which have preceded his, and which appear to throw some light upon this occult subject. In the *British Medical Journal* for last October, Mr. E. H. Hankin gave an account of the methods he had pursued for the purpose of rendering mice insuceptible to anthrax, by means of the subcutaneous use of an albumose obtained from cultures of the authrax bacillus. Dr. Sidney Martin communicated an account of his researches in the same line on May 22, 1889, to the Royal Society. He succeeded in obtaining

two albumoses, an alkaloid leucin, tyrosin and a peptone from cultures of this bacillus. These albumoses were strongly alkaline, and upon this condition, Dr. Martin assumed, their toxicity depended. When introduced into the living tissues, the toxic property of the albumose was similar to that of the alkaloid, only less rapid in its action. The symptoms correspond in the main with the effects which are said to attend the injection of Koch's liquid. The alkaloid used in this manner quickly produces death in mice, another factor going to show the close resemblance between the poison of Martin and the liquid medicament of Koch, which is used in what might be termed infinitesimal doses. Whether his inoculation liquid is prepared in like manner from the bacillus tuberculosis, remains to be seen. And if this assumption be correct, it is but a question of time when all diseases dependent upon a germ for its progress will become amenable to similar treatment. This statement, however, does not indicate that I am committed to the belief in the theory of the bacillus tuberculosis being the first cause of tubercular phthisis, as will appear from the study of other investigations referred to later on in this paper.

Mr. Rankin also reported to the Royal Society last year, that he had been able to obtain from cells that are, or can become phagocytes, a substance which is fatal to bacteria, thus confirming the doctrime of phagocytosis. In May of this year the *British Medical Journal*, commenting upon these discoveries, said: "It is obvious that this discovery throws a new light on Metschnikoff's phagocyte theory, and points to the *rationale* of pus-formation. Apparently we are dealing with a natural antiseptic—a substance produced by the organism to protect itself against microbes, and the question arises whether its administration can have an effect in modifying the course of the disease." The indications are that Prof. Koch has demonstrated the applicability of this principle in the treatment of tuberculosis, just as Martin and Hankin have shown its efficiency in arresting the progress of anthrax in mice. The weapons of the disease are the poisonous proteids, and nature meets them with weapons of a like character. The resistance of the organism is an inherent property, one of the normal functions of life; when this function has become impaired, or is temporarily suppressed, the disease-poison gains the upper hand, and if the condition is maintained for a sufficient length of time, the foundations of health are undermined, but never before have we had such a practical demonstration as in the case of the arrest of tuberculosis.

The investigations of Roussy ("Experimental Researches on the Pathology of Fever," Acad. de Med., February 12, and March 12, 1889,) seem to shed some light upon a subject intimately related to this line of study. In the course of his experiments Roussy found that certain diastases penetrating the blood became pyretogenous. By the injection of invertin into the blood, he produced in animals violent attacks of fever. Now, we know that the intestinal juice possesses the power of inverting cane-sugar; saccharose is transformed into invert sugar, and it is not unreasonable to assume that frequently occult febrile conditions may be due solely to intestinal derangements which permit or favor the absorption of invertin. The regulation of the diet in health, therefore, becomes a matter of paramount importance, and with attention to diet, and a knowledge of the principles underlying Koch's discovery, we are apparently on the threshold of a new era in the practice of medicine.

1910 Arch St.

PRACTICAL MIDWIFERY.—NOTES ON SEVENTY-FIVE CONSECUTIVE DELIVERIES.

BY R. B. MURPHY, M.D., ST. LOUIS, MO.

The following patients were delivered at the St. Louis Female Hospital between January 1, and April 15, 1890: 52 primiparæ, 23 multiparæ.

Presentations: Vertex, 72; breech, 2; footling, 1.

Positions: L.O.A., 40; R.O.A., 14; R.O.P., 15; L.O.P., 3; left sacro-anterior, 2; right sacro-posterior, 1.

One of the left sacro-anteriors was a miscarriage at about the sixth month.

There were 2 miscarriages and 3 premature births. In 3 the cause was syphilis; in the other 2, not known. In 1 of these from some unknown cause the membranes ruptured prematurely, viz., 22 hours before the delivery of a 4¼ pound female child, which, though not fully developed, lived.

Instrumental deliveries, 8.

The head had entered the pelvic excavation in all of the cases in which the forceps were applied.

Indications for use of forceps:

In 4 cases uterine inertia.

In 1 case a sacral exostosis.

In 1 case excessive convergence of pubic rami.

In 1 case L.O.P. without rotation, in which a 7 pound male child was delivered through a pelvis one inch smaller than the average measurements in all of its diameters.

In one case breech presentation, right sacro-posterior, an 8¾ pounds female child was delivered by the forceps applied to the after-coming head. Patient was a primipara, with rigid soft parts. The head had descended into the pelvis, and all pulsation in the cord had ceased for at least ten minutes before delivery. The child had made futile attempts at respiration and was, of course, born asphyxiated; still, after 15 minutes' artificial respiration, in connection with stimulation by hot and cold water alternately, it revived.

No multipara suffered rupture of the perineum.

Of the 52 primiparæ the perineum ruptured in 13, or 25%.

Considering that in all of the cases chloroform, which is a great aid in diminishing the force and frequency of the pains and consequent risk of rupture of the perine-

um, was administered in but a single instance, I think this compares favorably with existing statistics on this subject.

The danger of perineal rupture was diminished, not by the usual application of the hand, but when distention was great, and rupture seemed imminent, two fingers were inserted into the rectum and the thumb was applied to the occiput. Thus the operator has complete control of all movements of the head, and can assist flexion and prevent too rapid descent.

The ruptured perinei were united by silver wire sutures under cocaine anæsthesia a few hours after delivery. Sutures were removed on the seventh day after insertion, and the result was in all cases satisfactory.

Of the 75 children born, 37 were males and 38 females.

The average weight of the male children was 7⅛ pounds; female, 7 pounds.

The fœtal heart sounds were hear. n all except 8 cases.

The average rate of fœtal heart beat of male children was 135 per minute; female, 140 per minute.

The umbilical cord encircled the necks in 12 cases.

Eight of the placentas were of the battledore variety.

Three cases of ophthalmia neonatorum occurred. They were cured in a few days by the application to the conjunctiva three times a day of a solution of ar gent. nitrat., gr. j to ℥j, in connection with cleanliness.

As a preventive, in all cases the eyelids were wiped off with a piece of cotton immediately after birth, and where the mother had a suspicious vaginal discharge, a few drops of the above solution were applied to the conjunctiva of both eyes.

In one patient jaundice was prominent. It appeared about a week before delivery, increased gradually until immediately after labor, when it began to diminish, and was not noticeable after ten days. In this case the amniotic fluid was of a yellowish hue, and the infant's skin was markedly icteric. This disappeared in a few days.

Œdema of the limbs was troublesome in two cases. In one a few days before delivery it became excessive. The limbs and labia were swollen enormously.

This began to diminish a few hours after labor, but what seems remarkable, at the same time œdema of the face and neck became prominent. The voice became husky, and œdema of the glottis was feared.

However, after the action of a saline cathartic, this also gradually disappeared. Albuminuria persisted for several weeks after delivery. There were no puerperal convulsions, no post-partum hæmorrhage, no retained membranes or placentas, and no puerperal septicæmias. In no case was it necessary to introduce a hand or instrument high up into the uterus.

A temperature above 100° F. was rare. The highest temperature was 104° F., and this evidently was not caused by septic infection. This patient had a severe chill in the evening of the fourth day after labor, which was followed by this elevation of temperature. During the night three 10-gr. doses of quinine were administered, and neither chill nor fever was repeated.

The lochia were never offensive. The usual antiseptic method of the institution was strictly adhered to. The principal features of this are the administration, immediately after labor, of a vaginal douche of hot water containing hydrarg. bi-chloride in the proportion of 1 to 5,000. This is repeated twice daily for several days, the proportion of the antiseptic being each time diminished. Also a pad of cotton, moistened with this solution, is placed on the vulva. In no case was any constitutional effect of the mercury observed.

Of these 75 deliveries, every patient and every infant born alive left the hospital well.

PARAPHIMOSIS—A NEW METHOD OF REDUCTION.

BY H. C. SHUTTEE, M.D., WEST PLAINS, MO.

Read before the Southwestern Missouri District Medical Society at Springfield, October 13, 1890.

Paraphimosis is ordinarily a trivial affection, our standard text-books giving only a small space to it, and Wyeth, in his late work, does not even mention it. And yet it sometimes gives us no little trouble, especially if not soon relieved. A neglected case may result disastrously to the integrity of the glans penis.

Ordinarily, however, the pain and swelling are so great as to cause the patient to make known his condition and seek relief.

You are all familiar with the ordinary methods of reduction, viz., to grasp the penis behind the constriction, between the index and middle fingers of both hands, and, making pressure with the thumbs, compress the glans penis laterally and pull the strictured portion of the prepuce forward. Or the penis may be encircled with the thumb and forefinger of one hand and pressure made on the glans with thumb and fingers of the other.

Or the method of Mercier, described in "Smith's Operative Surgery," may be tried: "Place the index and middle finger of the right hand longitudinally along the lower surface of the penis, and the pulp of the thumb on the dorsum of the glans and the œdematous ridge in front of the point of stricture; by firm pressure crowding down the swollen mucous membrane of the prepuce, endeavor to insinuate the end of the thumb-nail under the stricture; succeeding in this, grasp the penis and the two fingers of the right hand beneath, in a circular manner with the left hand, and draw the strictured point up over the thumb-nail, and by simultaneous traction of both hands, replace the prepuce."

Several other methods are mentioned by different writers, but the ones above given are usually relied upon.

When the swelling is great, punctures and the application of cold and cocaine assist materially by reducing the enlargement, thus making reduction easier.

If the case is seen soon after the retraction of the

prepuce, and if the stricture is not very tight and the consequent swelling not great, one or the other of the usual methods of reduction will succeed. But in some cases, because of the tight constriction and swollen glans, reduction by any method becomes impossible, and the constricted prepuce must be cut.

It is with the hope that the method about to be described will, in many if not all of these cases, obviate the necessity of an operation, that this paper is presented.

It is said "there is nothing new under the sun"; therefore I do not know whether this method is new. I have been unable to find mention of it in the literature at my command.

June 11, 1890, Mr. R. brought to my office his boy, æt. 14 years, who, five days before, retracted his prepuce and was unable again to replace it. After he had made several ineffectual attempts to reduce it, the pain and swelling became so great that he made known his condition. The father poulticed the organ and vainly endeavored to relieve the paraphimosis. When seen by me the glans was greatly swollen, purplish in color, and the stricture was so tight that it held imprisoned behind it about two drams of thin, purulent fluid, which upon elevating the stricture with a probe, spurted out with considerable force. Cocaine was freely applied and several unsuccessful attempts were made to reduce it. I was preparing to operate when it occurred to me that if I could get an artificial thumb-nail under the stricture instead of my own thumb-nail, as in Mercier's method, the reduction could be effected. Mercier's method fails because, first, the thumb-nail is usually not long enough to reach under the stricture, and second, the pulp of the thumb occupies too much space.

An ordinary eye-lid spatula was well lubricated and, after pressing down with one hand as much as possible the parts in front of the strictured prepuce, the spatula, after a little patient effort, was slipped beneath the stricture and the prepuce readily drawn over it. A little thought will make the philosophy of this method clear. The reason a narrow prepuce cannot be replaced after it is drawn back over the glans, is because the corona glandis, which primarily forms the obstacle to its return, forms with the axis of the penis an acute, almost a right angle, whereas the front of the glans forms an inclined plane. If the corona also sloped gradually instead of abruptly,—if in other words it formed an inclined plane, no constriction would be likely to occur, because the prepuce could be as easily drawn forward as backward. Now if we can convert the posterior surface of the glans into an inclined plane, reduction ought to be easy.

It may be objected to this that anything slipped under the stricture and allowed to project past the glans would add materially to the size of the latter, but with the fingers laid longitudinally along the lower surface of the penis and the thumb pressing upon the projecting body, the glans can be materially reduced in size, while the other hand is left free to draw the prepuce forward. By using considerable pressure in this way, making a lever of the instrument beneath the constriction, it might be possible to stretch considerably the prepuce and thus make reduction easier. If the stricture is very tight, ordinary small probes may be passed beneath it and pushed to either side until enough are used to bridge the space between the stricture and corona glandis.

HOW SHALL WE TREAT OUR CASES OF PELVIC INFLAMMATION?

BY R. B. MAURY, M.D., MEMPHIS, TENN.

Abstract of a paper read before the Southern Surgical and Gynæcological Association, at Atlanta, Ga., Nov. 11, 1890.

The paper gave a comprehensive resume of the pathology of chronic pelvic inflammation as it has been clearly demonstrated by Bernutz, Polk, Coe and others, and by the results of abdominal section. This pathology is that of pelvic peritonitis dependent upon tubal disease—not cellulitis. The author declares the term, chronic cellulitis, a misnomer—a pathological condition which existed only in the imagination of the physician—a term which had been productive of pernicious results in practice, and which should no longer be used in connection with non-obstetric chronic pelvic inflammation. When their pathology rests upon such positive and abundant evidence, the question might be asked, why re-open a discussion upon it now?

Because it is evident from our Society proceedings, and hospital reports that great confusion exists in the medical mind to-day in regard to it. Dr. Byrne's case, discussed in the New York Obstetrical Society during the present year, was taken as an illustration. In speaking of such cases, the great tendency to relapses in chronic pelvic inflammation was illustrated by two cases, in which pus-tubes were found, five and seven years after attacks of peritonitis; and when it was supposed the patients were entirely restored to health.

Upon the subject of treatment, the writer admitted that by non-surgical therapeutic measures, large intra-peritoneal exudations are often absorbed, and even some tubal and ovarian inflammation entirely disappear, and recovery seems complete. But this is the exception and by no means the rule.

For the radical cure of chronic pelvic inflammation, non-surgical treatment fails in the majority of the cases. A great many women, suffering to a moderate degree, continue to do so in spite of the best-directed non-surgical measures, and, perhaps, wisely elect not to undergo operation.

As a rule, the only radical and permanent relief is afforded by removal of the diseased appendages. The treatment of pus-collections, of course, requires abdominal section.

REPORT ON PROGRESS.

THERAPEUTICS.

BY F. NEUHOFF, M.D., ST. LOUIS.

Codeine.

Dr. Loewenmeyer has recently tested the therapeutic value of codeine, in the Jewish Hospital in Berlin. The drug was administered to about 400 different patients suffering from a variety of complaints. From his experience the author concludes that codeine is an analogue of morphium, but that its narcotic power is less intense. It has, however, no noxious properties.

In functional painful affections of the abdominal and pelvic viscera (gastralgia, colic, etc.,) the drug usually relieved pain efficiently. When, later on, the pain returned, the same size of dose was again able to relieve it.

In pain arising from organic visceral diseases, as cancer or ulcer of the stomach, etc., codeine was not so useful, and it was frequently necessary to abandon it for morphine. Again, pains which occur paroxysmally and begin with their greatest intensity (as nephritic colic, etc.,) remained, as a rule, unaffected by codeine.

In pains arising from the genito-urinary organs codeine answered a good purpose. It is, of course, useless in localized peritonitis, as it has no power to check intestinal peristalsis. It is an efficient palliative in phthisis, bronchial asthma and angnia pectoris.

In painful affections of the brain and the spinal cord and of their envelopes, as well as neuralgia of peripheral origin, but little good can be effected by codeine.

It has, however, valuable hypnotic properties, even in other cases than those where pain is the cause of sleeplessness.

We see therefore, that codeine is of service only in a limited number of cases. Nevertheless it is advantageous to substitute it for morphine whenever possible, as it appears to have no deleterious effects on any organs of the body. This latter quality is one of great importance, especially where the drug has to be administered for a long period of time. Moreover, there does not appear any danger of producing what might be called from analogy codeinismus.

Some neurologists have praised codeine in the treatment of morphinism.—*Deut. Med. Woch.*

Sodium Nitrate in Asthma.

Pearce recommends nitrate of soda as the best of all the medicines which have been employed against asthma. He uses the drug, as a rule, without adjuvants. In some cases however in which there was insomnia he combined with it hyoscyamus. In a few other cases he gave it in conjunction with tincture of lobelia.

At first Pearce employed nitrate of soda in 10 to 15 grain doses. This dose however, weakened the patient, and it was necessary to reduce it to 3 or 4 grains.

As to hyoscyamus the author found it useless unless given in two teaspoonful doses of the tincture.—*Centblt. f. Therapie.*

Artificial Respiration by the Hypodermic Method.

Oxygen introduced by hypodermic injections is absorbed by the capillaries which are situated near the site where the emphysema is produced, just as it happens in the case of the oxygen of the air which is present in the alveoles of the lung. The carbonic acid which is carried by the blood, is eliminated at the point where the injection is made in the same manner as on the surface of the lungs.

During the injections the respiratory movements of the chest diminish.

Oxygen injections produce no irritation or subsequent troubles. As oxygen is more active in the nascent state, it ought to be thus employed in hypodermic respiration.

Artificial hypodermic respiration finds important application in all the diseases which produce a diminution of the aeration of the blood by an impediment of normal respiration.—*Le Tribune Med.*

Iodoform in Hæmoptysis.

According to Chauvin and Jorisenne, iodoform has given satisfactory results in cases of hæmoptysis, in which ergotine had been administered in vain. The following formula is recommended:

℞ Iodoformi, - - - 0.05 (gr. $^5/_6$).
Ext. gentianæ, - - - - q. s.

This amount is for one pill.

From 3 to 5 pills are taken in 24 hours. If it seems advisable, 10 centigrammes of tannin may be added to each pill.

These pills have never been known to irritate the stomach.—*La France Med.*

Enema Against Oxyuris Vermicularis.

℞ Tinct. rhei, - - - - gtt. xxv,
Magnes. carbon., - - - gr. iij.
Tinct. zingiberis, - - - - gtt. j.
Aquæ, - - - ℥iij ʒvij.
M. Sig.. For one enema.—*Le Bulletin Med.*

Bromide of Potash in Chronic Metritis.

It cannot be denied that the continued use of potassium bromide is of great benefit in congestive conditions of the utero-ovarian apparatus.

Dr. Fauquez has shown that bromide of sodium acts especially on the general nutrition, that bromide of ammonium is especially useful in cerebral excitement, and that bromide of potassium is the best moderator of

the excito-motor power of the spinal cord. To allay the reflexes originating from the genital organs, to combat the vaso-motor paralysis of the lumbar cord and sympathetic; in short, to relieve the uterine congestion as well as the reflex disorders arising from the chronic metritis, it is therefore the bromide of potash to which preference must be given.

The drug ought to be continued for many months. The amount given in one day need not exceed 30 grains. —*La France Med.*

Treatment of Tinea Tonsurans.

Simpson (*Med. Analectic*) has had excellent success with the following treatment for ringworm of the scalp and body: Cut the hair short and wash the scalp well with tincture of green soap, and then apply the following solution with a camel's-hair brush:

℞ Hydrargyri chlorid. corrosiv., - gr j.
Collodii, - - - - - - ℥j.—M.

This treatment may be recommended for three reasons:

1. The corrosive sublimate destroys the fungi.
2. The ether of the collodion penetrates to the root of the hair, conveying the corrosive sublimate to the seat of the disease.
3. The film formed by the collodion shuts off the supply of oxygen to the fungi and thus helps to destroy them.

Treatment of Diabetes.

Lancereaux was the first to establish the connection between alteration of the pancreas and that form of diabetes in which the patient loses in weight, and becomes emaciated.

Minkowski and Mering produced this form of the disease in dogs, by removal of the pancreas. Sometimes only a light form of diabetes was produced. In those cases some of the pancreas had been left behind. The form of diabetes thus produced was held in check by suppression of starchy diet. Lepine repeated these experiments, and found, that by the injection of chyle from well-nourished animals, or of vegetable diastase in the veins of dogs deprived of their pancreas, he was able to diminish the excretion of sugar. He afterwards obtained the same result in a diabetic by giving him pancreatine.

Baumel maintains, since 1881, that the alteration of the pancreas is constant in "fat diabetes" as well as in "lean diabetes." In the latter case the lesion is visible to the naked eye, in the former case it is microscopic. This sage was able to find the lesion on post-mortem in four instances. According to his opinion, macroscopic lesions of the pancreas produce similar results; that is, they suppress or diminish the absorption of the pancreatic juice; they produce the absence of the diastatic pancreatic ferment in the intestinal tubes, or, perhaps, in the liver, thus entailing the incomplete transformation of the amylaceous material and a consequent excess of glycose in the organism.

Defresne found, that under the excessive administration of pancreatine, one-third of the number of rabbits died, one-fifth became glycosuric, and all of them became hyperglycohæmic. Besides, the glycogenic material had, in a great measure, disappeared from the liver.

These experiments show that pancreatine preserves its diastatic properties after its sojourn in the stomach, and that it can be utilized in the treatment of diabetes.

I myself have seen pancreatine influence the excretion of sugar in two cases of diabetes. In one of these cases, the glycosuria disappeared completely, and in the other case it became greatly diminished.—Dr. Fanconneau, in *Le Progres Med.*

Mushrooms and Mushroom Poisoning formed the title of a paper read by Dr. E. J. Forster, of Charlestown, before the Massachusetts Medical Society. This is an article of food no doubt too little appreciated in this country where mushrooms are seldom eaten except the kind that comes in cans, which, according to Dr. Forster, no more resembles the fresh article than "does hashed corned beef a good porter-house steak." But in spite of Dr. Forster's elaborate instructions for recognizing the harmless varieties and avoiding the poisonous, it is to be doubted if one would care to trust his ability to distinguish the good from the bad after merely reading a description, particularly since the consequences of error would be disastrous. A better way to obtain mushrooms in plenty and safety is to make a bed in the cellar and grow them from the spawn which may be procured at any seedstore. They are not difficult to raise and are very prolific. It seems that there is not a sharp dividing line between the safe and the dangerous mushrooms, but that there are several varieties that are mildly poisonous. Indeed the more the subject is studied the stronger grows the probability that there is but one variety that is actually deadly, although alarming symptoms have been produced by several kinds. In the cases of fatal poisoning the symptoms are delayed in their appearance from eight to twelve hours, and are those of an irritant narcotic. Dr. Forster says that he has been able to find no fatal case of mushroom poisoning where atropia had been given in large doses, half a grain or more, and he regards atropia as the true physiological antidote of muscarin, the active poisonous principle of mushrooms.—*Northwestern Lancet.*

Apomorphine in Croup.—Dr. Alexander F. Samuel (*Therapeutic Gazette*) finds apomorphine of the utmost value in croup. He dissolves a ⅛ grain pellet in 6 teaspoonfuls of water, and gives a teaspoonful every five or ten minutes until emesis results. The second or third dose usually does the work. When the child is past swallowing, the remedy is given hypodermically, of course in less water. He has no dread of croup if only he has the apomorphine pellets with him.—*Dixie Doctor.*

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BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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THE KOCH METHOD.

Nothing of especial importance with regard to the development of the Koch treatment of tuberculosis has occurred since our last issue.

More cases of lupus have been reported as healed under its influence; other cases are reported as having relapsed after such apparent cures.

Prof. Koch now has twenty patients affected with phthisis pulmonalis of varying degrees of senerity under his direct supervision; he says that in fifteen of these the bacilli have completely disappeared from the sputa. They have gained much in weight, in general appearance and in spirits. In the remaining five cases there seems to be no indication of hindering the progress of the disease. These latter are cases in which there are pulmonary cavities.

One child who was severely affected with lupus was almost *in extremis* when the method was applied; the patient died two days later.

A German paper, the *Frank Courier*, claims to have discovered the method of preparation of the fluid used, which, it says, "is prepared in an incubating oven within a space that is hermetically sealed and sterilized and thereby rendered free from fungus. The interior of the air-tight space is divided by an unglazed porcelain diaphragm into an upper and lower section. In the upper section is placed salted meat-broth in a gelatinous state, containing colonies of the tubercle germ. This mass gradually liquefies and the gelatine liquid drops slowly through the porcelain plates into the lower section. The liquid then contains all the secretory products, but is free from all living or dead germs or reproductive spores, and is the lymph as used."

Emperor Wilhelm on November 22, bestowed on Prof. Koch the Grand Cross of the Order of the Red Eagle—said to be the first time that this decoration has been bestowed upon anyone who did not possess the preceding classes of the Order. It is aptly remarked that many a Knight can be created by the Emperor, but can he create another Koch?

THE TREATMENT OF CHRONIC CONSTIPATION.

At a meeting of the Berlin Medical Society (*Deutche Medizinal Zeitung*), Dr. Theodore Flatau read a paper on the above subject. He began by stating that the most frequent indication which presents itself to the practitioner is the relief of constipation. Usually this gives no difficulty and the indication is met by the exhibition of some purgative, no matter what the form of constipation may be. When, however, purgation is frequently necessary, or where a complication appears in the form of habitual obstipation, difficulties arise, and whoever has had to meet this trouble for some time will appreciate at its true value a simple but at the same highly efficient remedy. The question is of the treatment of obstipation in constitutionally retarded persistalsis of the colon, and Flatau excludes those cases in which the cause lies in a gastro-intestinal catarrh, a chronic catarrh or an ulcer of the stomach. Flatau includes all those cases which proceed from a sedentary manner of life, the most common sequelæ in which are catarrh of the colon and hæmorrhoids, while other results appearing higher up, such as distension and flatulence, are often erroneously attributed to catarrhs of the upper intestine, the truth being that these symptoms generally disappear without further treatment after the constipation has been relieved. The same is true of general disturbances of the nervous system, as in a lowering of spirits, the depression being of a peculiarly melancholic character.

Of late the long-continued use of purgatives has been greatly restricted, and with justice; the mechanical treatment of chronic obstipation has been much advocated, that is, the treatment by massage, electricity, and hydropathic remedies. All these methods of treatment, however, demand that the patient be able to devote time and the necessary means. To carry them out properly also requires no inconsiderable change in the habits of the patient.

Flatau therefore believes that all treatment of chronic obstipation by means of purgatives with regard to the anatomical condition should be given up, and for the class of cases suggested above, in which torpor of the colon can be demonstrated as the cause of the affection, he urges the use of his method. He hopes that by the use of this simple procedure alone we may be able to entirely remove the trouble, or that it may at any rate be possible to alternate it with the mechanical method of treatment.

He states that the methods are easiest of application in those cases in which there is as a result of chronic obstipation and relaxation of peristalsis a chronic proctitis, and the prolapse of a greater or less portion of rectal mucous membrane at the anus. The nates are widely separated and after washing the exposed mucous membrane enough powdered boric acid to cover the tip of a knife-blade is strewn upon or rubbed into it. In patients in whom the rectal mucous membrane is not visible the powder must be insufflated. It is desirable that the treatment should be carried out by the physician himself the first few times. Each application requires about 3 grams (45 grains) of boric acid; the patient must afterwards rest quietly for a time, so as to give the powder time to be taken up. In from ½ to 3 hours we will be almost certain to observe pretty strong peristaltic movements along the course of the colon, and probably also along the small intestine; about the prompt action of the remedy there can be no doubt, for Flatau has demonstrated it in a number of cases. In the first few days of treatment an evacuation occurs quite regularly three or four times a day. It is of importance to tell the patient to obey the inclination to defecate, which is weak at first, for if this be not done the stronger persistaltic movements may also be overlooked. A so-called tolerance of the drug is not established. Among the cases which plainly presented the indication noted above, the author has never known the remedy to fail him; on the contrary, he has been able to see not only a permanent strengthening of the muscular structure of the colon, but also a return to normal peristaltic activity where the treatment was carried out for some time and the intervals between the single applications were gradually increased. In proof he submits some brilliant results.

Attempts with a series of other substances (chalk, zinc oxide, iodol, soziodol, and even boric acid in glycerin solution) did not give anything like the satisfactory results accomplished by boric acid in moderate quantities. The author assumes that a similar stimulation of the mesenteric plexus is brought about by the irritation set up by pure boric acid applied to the rectal mucous membrane, as is accomplished under normal circumstances by the voluntary movements of the levator and sphincter ani, or of those set up by the passage of the electric current.

In answer to the objection that may be brought up against the long-continued use of boric acid, that its absorption may prove harmful, the author brings to mind the experiments of Neumann, of Dorpat, the therapeutic results from the internal administration of boric acid reported by Rosenthal, and the case of Molodenkow.

In the cases reported by Flatau purgatives and enemata had previously been resorted to, and in some cases curative gymnastics and hydrotherapeutic means had also been employed. The torpid condition of the colon should in each case be proven by palpation and percussion after defecation, as well as by catarrh of the rectum from constipation.

The Digestibility of Meat and Fish.

Some interesting and practical points may be derived from the results of the investigations made by Dr. M. Popoff into the relative digestibility of beef and fish, variously prepared (*Zeit. f. Phys. Chem.—Med.-Chir. Rund.*). His results are formulated as follows: 1. Both beef and fish are more easily digestible in the raw state than when cooked. Cooking lessens the digestibility, and this effect is more marked on beef than on fish. 2. The duration of cooking has also an unfavorable effect, especially on beef, the longer the time, the less digestible the meat will be. 3. Beef in any form is more digestible than fish prepared the same way, except when smoked. 4. Smoked fish is easier of digestion than raw and cooked fish. 5. Fat in fish does not hinder digestion.

To be more exact, the following figures will express the relative digestibility of the meats named, making raw beef the standard:

Beef, raw,	100.0
" cooked,	83.4
" smoked,	71.0
" " and cooked,	60.6
Eel, raw,	71 1
" cooked,	68.9
" smoked,	91.3
Plaice,	66.8
" cooked,	60.6
" smoked,	106.1

Spontaneous Bacteriuria.

A paper on this subject was read by Dr. R. Van Santvoord, of New York, before the Harlem Medical Association, and was abstracted in the *Times and Register*. This condition, though but seldom referred to, is one which is said to be quite common, and consists of the presence in freshly passed urine, without specific disease, of bacteria similar to those found in decomposing urine. There are two forms of the disease, in one of which the urine is clear after being passed; in the other the urine resembles decomposing urine. Salicylate of soda either cures or greatly relieves the symptoms of the former class, but has no effect on those of the latter. The symptoms of the second class of cases seem to depend on slight vesical atony, with spontaneous invasion of the bladder by bacteria, with the presence of residual urine and the occurrence of any slight exposure the irritation already established is easily transformed into an acute inflammation. Here the indications were for the treatment of the vesical atony, by strychnine, cantharides, and possibly electricity. Narcotics should not be used very freely, as they might lower vesical contraction. Relief would follow when the bladder became able to empty itself.

Another physician present spoke of three cases of his own, which he had treated with salol, benzoic and bo-

racic acid, each three grains four times daily, and which got well.

Dr. Manley thought more reliance should be placed on direct antisepsis of the bladder. He believes in having the patient drink large quantities of water, and in the use of buchu or squills. In certain obstinate cases dilatation of the sphincter might be of service, or even supra-pubic cystotomy might be necessary.

The Control of Hæmorrhage Deep in the Pelvis.

Dr. Chas. P. Noble, in the *Medical News*, calls attention to the want of a method of controlling hæmorrhage deep in the pelvis; the usual methods sometimes fail and the only resource is to stuff the pelvis with gauze. The procedure, which is well known and simple, but not often thought of in this application, is the ligation of the uterine and ovarian arteries. This can be done when it is either difficult or wholly impossible to satisfactorily employ the ordinary methods of hæmostasis. Some of the conditions in which it may be employed are: In the case of fleshy pedicles, where shrinkage within the pedicle may allow bleeding; in extensive raw surfaces on the broad ligaments left by the separation of dense adhesions, or after the removal of disorganized ovaries and tubes; in certain cases of extra-uterine pregnancy. It is also of value where secondary hæmorrhage is feared, as in myomectomy, and hysterectomy with intra-peritoneal stump. The procedure acquires special value where the broad ligament is firmly fixed by exudations. Its applicability in the disposal of raw surfaces cannot be overlooked.

As above stated, the ligation of the arteries not at all unusual or extroardinary, but it may in many cases prove useful and we mention it for the reason that it is a simple device that is not always thought of at the time. Dr. Noble has employed it several times with great satisfaction.

Primary Anæsthesia in Minor Operations.

Dr. F. B. Harrington, M.D., in the *Boston Medical and Surgical Journal*, refers to the need of an anæsthetic which shall be suitable for minor surgical operations of short duration, and in which the after-effects shall be but trifling. He believes that the brief duration of nitrous oxide anæsthesia makes it unsuitable for minor surgical operations, although it is rapid and safe of application. Chloroform he has never used. Cocaine though of use in many cases, is not without danger and sometimes fails. Profound ether anæsthesia requires time and previous preparation of the patient, and the after-effects are often very tedious. He has for these reasons made use of "primary" ether anæsthesia for the last three years in several hundred surgical cases, and has never seen any ill effects from the use of ether in this way. The method has been perfectly satisfactory in over 90% of the cases. Vomiting rarely occurs. Statistics of his cases show that from 6 to 73 inhalations were neccessary for the production of anæsthesia, occupying from 20 seconds to 7 minutes; the period of insensibility lasted from 25 seconds to 6 minutes. The following is his description of the method of procedure he has adopted:

As far as is possible in a short time, the confidence of the patient is gained. They are told that a few breaths will make them insensible to pain and that in a few minutes they will be in a condition to go home. Women and children are, as a rule, less alarmed if they are allowd to inhale the ether in a sitting posture. The effort of keeping erect takes the attention and the position is less suggestive of complete helplessness. This is not a desirable position for strong men unless they are held in by a strap. It is well always to have assistants at hand, although a large number of cases might easily be handled alone. An ounce or more of ether is poured on a sponge or towel. This is given to the patient with directions to breathe rapidly and deeply.

It is important to teach the patient how he is to breathe before applying the ether. I tell them to breathe as a dog pants. The rapid and moderately deep breath I think is the best one, not only for rapid primary anæsthesia, but also for the induction of profound anæsthesia. It is a well-known fact that rapid breathing of air itself produces a certain degree of anæsthesia. Another reason for rapid breathing is that there is a tendency to continue any muscular act in an automatic way after consciousness of the act has ceased. We see this in the repeated use of certain words or phrases, or the continuance of a motion of the leg or arm. I often see patients wholly unconscious of pain breathing at the rate of 40 per minute, the impulse to such breathing having been given during consciousness.

The tendency is naturally toward slow breathing and much more time is required if the breathing be slow. The sponge should be held a short distance from the face and should not cause coughing.

After a dozen or more rapid breaths the operator asks the patient if he is ready. This is repeated until the patient answers "yes" or there is no response. If but an incision or two is necessary, the other is at once removed; if more time is required the ether is applied for a few seconds longer.

MEDICAL ITEMS.

Pineapple Juice in Diphtheria.—An item now going the rounds alleges that the negroes of Louisiana frequently use pineapple juice in the treatment of diphtheria, and with success.

Boric Acid for Preserving Beef.—The German Government has forbidden contractors supplying preserved meat to the German army to use boric acid, as it has been found that beef so treated retards digestion.

Oxide of Lead in a Loaf of Bread.—The oxide of lead found in the bread of a Chicago baker has been traced to the stencilling of the name of the miller on the bag containing the flour from which the bread was made, the color having been put on so heavily that it soaked through the cloth.

How did Jesus Christ Die?—A writer in the *Medical Record* does not believe that Jesus Christ died on the cross, and argues that he was in a state of syncope, or feigned death, in which condition he was removed by his friends to a safe refuge, where he lived out his days in peace. Nowadays science knows no halting place.

Normal Weight of Man.—A rule to determine the normal weight of man is as follows: A man should weigh just as many kilogrammes as he measures centimeters in height, after deducting one meter. A man who measures in height 1 meter 80 centimeters (5 ft. 11 in.) should weigh 80 kilogrammes, or about 160 pounds. The rule is both ingenious and approximately correct.

Rates on Surgical Chairs.—The Inter State Commerce Commission has ordered that the present rate on surgical chairs be reduced—if shipped in less than carloads—from double first class to first-class, or a reduction of about one half in the rate. This was what the rate was formerly for a long period of time, and until recently, when it was advanced to double first-class, under the analogies of classification.

Death of Dr. A. B. Carpenter.—Dr. Arthur B. Carpenter died suddenly at his residence in Cleveland, Ohio, on October 15, of fatty degeneration of the heart. He was 37 years old, and had always appeared of robust health. Dr. Carpenter had made many valuable contributions to gynæcology, his special branch, in which he had a large practice. He took an active interest in local and national medical societies. In accordance with his wish, the remains were cremated at Buffalo.

Death of Dr. H. J. Bigelow.—Dr. Henry J. Bigelow died at Newton, Mass., at the age of 70, on October 30. He will be remembered for his many valuable contributions to surgery, among the most prominent of which is the operation of lithotrity, invented by him. During his life he was the recipient of many and high honors. He retired from practice in 1886, having been for some time a sufferer from gastric and hepatic diseases.

Curious Accidents.—Some very strange accidents are brought to light by the accident insurance business. For instance a man at Zaliska, Ohio, a stationary engineer, was kicked very severely by a hog. It disabled him for quite a number of weeks, and he was paid $97. Another case was that of a man at Chillicothe, Ohio. As he was stooping to pick up some kindling wood a game rooster gaffed him in the wrist, cutting an artery, which disabled him for some time.

Alvarenga Prize of the College of Physicians of Philadelphia.—The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about $180, will be made on July 14, 1891. Essays intended for competition may be upon any subject in Medicine, and must be received by the Secretary of the College on or before May 1, 1891.

Practice of Drinking Cologne.—It is said that the practice of drinking cologne is becoming very common in Europe and in this country, and, as an indication of this, that the sale of the perfume has increased greatly of late years. Women are more addicted to the habit than men, and a writer in the *Quarterly Journal of Inebriety* says that the presence of obscure and complex nervous disorders in a woman who uses cologne externally should always suggest the possibility of its internal use.

Is Leprosy Hereditary?—The United States Consul in Venezuela states that in the Island of Maracaibo, which serves as a leper colony, marriages are permitted amongst lepers. During the last 14 or 15 years there have been two births among the lepers. Neither child has shown any symptom of leprosy, and one of them, having lived to the age of 14 in the Leper Island, has been allowed to leave and to enter society on the certificate of a competent board of inspectors that he is perfectly healthy.

A Local Anæsthetic Formula.—An exchange says: Local anæsthesia is produced at one of the leading hospitals by means of a spray composed of 10 parts of chloroform, 15 parts of ether and 1 part of methol. After one minute's application of this compound spray, complete anæthesia of the skin and neighboring tissues is produced and will persist from 2 to 6 minutes. This suffices for some minor operations, such as opening an abscess of the cervical glands, incising a deep-seated whitlow, or excising an epithelioma of the nose, etc.

Phenacetin in Typhoid Fever.—Phenacetin has been used with great success by Dr. Sommer in the treatment of typhoid fever, thus confirming the favorable views of its action which have been expressed by Masius and others. The dose employed for adults was four grains, which was repeated from two to four times during the twenty-four hours. Children were given only half this dose. No less than sixty cases were treated in this way with but one fatal case, after which it is noted that the patient was not subjected to phenacetin treatment until three weeks from the commencement of the attack. In no case were there any serious complications.—*British and Colonial Druggist.*

Cannabis Indica in Impotency.—The action of cannabis Indica upon the genito-urinary functions commends it for the relief of impotence, more especially when due to functional derangements with a depressed condition of the vital powers; but in these cases care should be exercised that the drug is not given in too large doses. As synergists, it will be found advisable to combine with it small quantities of both nux vomica and damiana as follows: Ext. cannabis Indicæ, gr. v.; ext. nucis vomicæ, gr. v.; ext. damianæ, gr. xx. M. et ft. pil. No. xx. One pill after meals and at bed-hour.—*Med. Age.*

The Southern Surgical and Gynæcological Association, at its recent meeting at Atlanta, Ga., elected the following officers for the ensuing year:

President.—Dr. L. S. McMurtry, Louisville, Ky.

First Vice-President.—Dr. McF. Gaston, Atlanta, Ga.

Second Vice-President.—Dr. J. T. Wilson, Sherman, Texas.

Secretary.—Dr. W. E. B. Davis, Birmingham, Ala.

Treasurer.—Dr. Hardin F. Cochrane, Birmingham, Ala.

Place of meeting, Richmond, Virginia, second Tuesday in November, 1891.

Small-pox Extinct in Ireland.—Not a single death from small pox was registered in Ireland last year. From this scourge, at all events, the "distressful country" appears to be gradually freeing itself. Over the last ten years the average annual number of deaths was one hundred ahd thirty, but this average is due to the more serious state of things prevailing in the early stages of the decade. Since 1883 there has only been one year in which the number of deaths from small pox was as high as fourteen. That was in 1887. In 1885 there were but four deaths from small-pox registered in Ireland; in 1886, two; in 1884, there was only one; in 1888 there were three, and, as above stated, in 1889 there was not one.

Chloralamide as a Hypnotic.—Dr. G. Generisch has prescribed chloralamide in thirty two cases, giving thirty grains at night. This dose was generally sufficient to induce sleep within half an hour. A more certain effect and a longer sleep was obtained when forty five or sixty grains were prescribed. He considers chloralamide preferable to other hypnotics, both because it acts more decidedly and because it is less unpleasant to take. It must be remembered that its effect is negative when sleeplessness is due to pain. It is not by any means a dangerous drug, but headache and vomiting may occur after a very large dose. It does not seem to affect the digestion nor the renal functions. The pulse generally becomes softer and more frequent.—*Med. Record.*

The Preservation of Milk.—After considering various popular means for the perservation of milk, Dr. Lazarus, in an article in the *Zeitschrift f. Hygiene*, viii, 2, 1890, of which an abstract is published in the *Deutsche Medizinal Zeitung*, Sept. 25, 1890, says that all the ordinary preservatives are to be regarded with distrust. In domestic use only salicylic acid is to be commended, and this only when better means are wanting. For the ready recognition of substances added to milk to preserve it: (a) a specimen is heated for an hour or two; a brownish-red coloration indicates the presence of an alkali, such as soda, sodium bicarbonate, borax or lime; (b) a violet coloration upon the addition of a few drops of a dilute solution of iron chloride is indicative of the presence of salicylic acid.—*Med. and Surg. Rep.*

Koch's Treatment in St. Louis.—Dr. Otto E. Forster, the well known specialist of this city, who has been doing clinical work in Vienna, left that city as soon as Koch's discovery was announced, and is now at Berlin, studying the new treatment. Dr. Forster visited Prof. Koch some nine weeks ago, and enjoyed the hospitality of his home, in consequence of a letter of introduction furnished him by Dr. Koch's brother in this city, of the art firm of Redheffer and Koch. We are informed that Dr. Forster will return as soon as he is fully familar with the new method, and will bring with him a supply of paratoloid, as the remedy is called, and all the necessary instruments. He will introduce the treatment in St. Louis, and will probably open a Koch Hospital as soon as the private hospitals shall prove inadequate for the accommodation of tuberculous patients.

Cocaine Anæsthesia Obtained by Means of Cataphoresis.—Dr. Arthur Harries (*Lancet*, October 25, 1890) writes that where local anæsthesia is required, cocaine hydrochlorate, administered by means of cataphoresis instead of hypodermically, should be employed. In a number of cases in which he adopted this method the anæsthesia was complete, and toxic symptoms of the drug were not observed. He uses a 10% solution of cocaine, with which the flannel-padded positive electrode, corresponding to the size of the area to be anæsthetized, is saturated. The large negative electrode is soaked in salt solution and placed in a suitable position on the surface of the body. A continuous current of twenty-five milliamperes is then passed for forty minutes. Dr. Harries believes that the causes of failure with this method are: That the currents used are too weak, and applied for too brief a time; that the operator does not understand the apparatus, and that a reserved current is used.—*Med. News.*

Texas in Winter.—The climate of Texas during the Winter months is mild, dry, and healthful, and is very favorable to those with weak lungs, pulmonary complaints, and the pleasure seeker. Winter tourist tickets are now on sale at greatly reduced rates via Iron Mountain Route, and through sleeping cars to all points in in Texas from St. Louis. Write to H. C. Townsend, General Passenger and Ticket Agent, St. Lous, Mo., for illustrated resort book.

SOCIETY PROCEEDINGS.

TRI-STATE MEDICAL ASSOCIATION, OF ALABAMA, GEORGIA, AND TENNESSEE.

SECOND ANNUAL MEETING, HELD IN CHATTANOOGA, TENNESSEE, OCTOBER 14, 15 AND 16, 1890.

[CONCLUDED.]

OCTOBER 16.—THIRD DAY.—MORNING SESSION.

DR. T. HILLIARD WOOD, of Nashville, Tenn., contributed a paper on

HYPERTROPHY OF THE TONSILS,

in which he said the treatment adopted for relief of hypertrophy of the tonsils had been subject to many variations. The treatment for the reduction of enlarged tonsils was divided into local, constitutional and operative. If the enlargement be due to swelling of the mucous membrane or to engorgement and congestion of the tonsil, the application of astringents may be of service. The most useful local remedies in the hands of the author are the sub-sulphate and perchloride of iron, about 1 to 6 or 8 in water or glycerine, and alum or tannin in powder. But where there is real overgrowth, the remedy, as Mackenzie well observes, must be of a destructive character, and escharotics, not astringents, must be used. Among escharotics, London paste is useful and should be applied once or twice a week. This will produce a slough, and repeated applications will reduce the gland to a normal size.

Constitutional measures to effect reduction of the tonsils includes remedies to combat the diathesis upon which the enlargement often depends, such as iodide of potassium, cod liver oil and the general tonics, as the preparations of iron, and the bitter tonics.

With reference to operative treatment, excision by the tonsillotome is most popular, although the writer prefers the bistoury and vulsellum forceps. The operation is rendered painless by applying to the tonsil a solution of cocaine, and by injecting, with a hypodermic syringe a few drops of the same solution into the substance of the gland. As a rule, general anæsthetics should not be used.

To reduce to a minimum the danger from hæmorrhage, we have comparatively bloodless operations by the cold snare, ignipuncture, and the galvano-cautery amydalatome seems preferable, and is highly recommended by Wright, of Brooklyn. Ignipuncture is tedious, requiring repeated applications, and attended by considerable pain. Moreover, it cannot be employed in the cases of refractory children.

DR. N. C. STEELE, of Chattanooga, said the amount of hæmorrhage depended upon the condition of the tonsil. He would use the bistoury in adults and the tonsillotome in children.

DR. E. T. CAMP has been able to reduce hypertrophied tonsils without operation, by using iodized phenol locally, and general remedies.

DR. GEO. A. BAXTER suggested painting the tonsil with flexible collodion.

DR. SAVAGE said there were two indications for operating upon the tonsils, viz.: repeated attacks of tonsilitis and where breathing was interfered with. He uses only Mathews' tonsillotome. Never uses cocaine. From personal experience and observation he knew the operation was not very painful.

DR. GAHAGAN suggested cold food in cases of incipient tonsillitis, and plenty of cold liquids.

DR. REEVES thinks in removing the tonsils we leave cicatricial tissue and so alter the voice. He uses tincture of iodine. He thinks cocaine will not control the hæmorrhage.

DR. WILLIS F. WESTMORELAND, of Atlanta, Ga., said the frequency of enlarged tonsils was due to exposure; hence the greater number of cases observed in males. He would operate as soon as they gave trouble. He prefers the bistoury. Cocaine he has abandoned on account of increased bleeding. Ignipuncture was too painful.

DR. FRANK TRESTER SMITH, of Chattanooga, resorts to ignipuncture where he cannot get consent to incision. Bleeding after the use of cocaine may continue for a long time. He said the indications for operating with him were interference with breathing, impairment of the voice, and recurrent tonsilitis. The voice after operation improved, as a rule.

AFTERNOON SESSION.

DR. E. A. COBLEIGH, of Chattanooga, read a paper entitled

A CASE OF REMARKABLE INJURY WITH RECOVERY,

and exhibited the patient. [For the paper, see p. 403.]

DR. H. CRUMLEY, of Chattanooga, presented a case resembling epilepsy, which was examined by members of the Association.

DR. J. R. RATHMELL, of Chattanooga, reported a

CASE OF ABSCESS OF THE LIVER.

The patient had dysentery in July, 1889. Dr. Crumley was called to see the case December 17. The abscess began to discharge through the lung December 21, and continued until February 27, 1890, when he died. No autopsy.

DR. RATHMELL also reported a

CASE OF TYPHOID FEVER,

and Dr. W. C. Townes, of Chattanooga, presented specimens of the intestines, spleen and mesentery of the case.

DR. TOWNES then followed with a paper on

DILATED CARDIAC HYPERTROPHY, WITH NEPHRITIC COMPLICATIONS,

illustrating his paper by specimens of the condition and others for comparison. Attention was called to the etiology, especially alcoholism, with its effects upon the

kidney and liver. The specimens showed well the conditions mentioned and outlined. Heart's weight was 26½ ounces, normal heart being about 9 ounces. The kidney was that termed by H. F. Formad, of Philadelphia, "pig back."

In the treatment of this patient tincture of digitalis was administered, ten drops increased to sixty every hour. Then tincture of strophanthus was given, 20 drops three times daily, with heart beats reduced from 124 per minute to 47.

Evening Session.

Dr. R. J. Trippe, of Chattanooga, reported a

Case of Peritonitis,

which occurred in a strong, muscular, heavy set negro, who had been struck with a crow-bar across the abdomen. The patient died.

Dr. C. H. Holland, of Chattanooga, reported a

Case of Phlegmonous Abscess,

occurring in an unusually large man, æt. 25 years, six feet high, and weight, 349 pounds.

Dr. J. E. Purdon, of Cullman, Alabama, contributed a very elaborate paper on the

Dynamics of Mediumism,

and, after long and careful study of the subject, drew fifteen conclusions.

Dr. W. C. Maples, of Bellefonte, Ala., read a paper on

Some Irregular Forms of Epilepsy with Report of a Case.

He thinks his case was either one of epilepsy or hystero-epilepsy. His reasons for thinking it a case of epilepsy were:

1. The amount of fever. In hystero-epilepsy there is generally but little or no fever. Some authors hold that we may have a true hysterical fever, but the weight of authority is against that opinion.

2. The complete unconsciousness.

3. The biting of the tongue. Hystero-epileptics seldom or never injure themselves.

4. The facial expression and pupillary phenomena. The facial expression is generally calm and serene throughout a hystero-epileptic attack.

5. The absence of hysterical phenomena in the interval between the attacks.

6. The sex. While hystero-epilepsy does occur in males, all authors are agreed that it does so quite seldom.

The treatment was by large doses of bromide of potassium by the mouth, and morphine hypodermatically. There were no sequelæ.

Dr. J. D. Gibson, of Birmingham, Ala., presented a paper on

Urethral Strictures and its Complications.

In the use of sounds, he considers the spherical, or the acorn-pointed sound, the most convenient and practical instrument for the detection of stricture; while Otis and Weir and many others had their special instruments.

Dr. Gibson said that if he were compelled to use only one instrument in the cure of all strictures, he would use the sound. He believed that when it was properly used, that there were very few strictures that could not be relieved, and better so, by it, than any other means; and that the only stricture necessary to invoke the aid of the urethrotome was the old, tight and unyieding stricture in the pendant urethra and meatus. Young and inexperienced men are apt to be disappointed in the use of the sound, simply because they tried to go too fast; the idea should be to dilate the stricture and produce absorption, and not rupture.

Internal urethrotomy, while often abused, was a most potent means of treating urethral stricture, it being especially applicable for old and firm strictures in the pendant urethra and meatus.

Dr. P. S. Hayes, of Chicago, followed with a paper entitled

Notes on Apostoli's Method of the Treatment of Uterine Fibroids.

He said that one of the best demonstrated facts in the Apostoli operation was the arrest of all uterine hæmorrhages, excepting those cases that are due to the puerperal condition. All observers unite in recognizing that the positive pole is the one to be connected with the intra-uterine electrode. To the thinking physician the query is, why the positive? And the answer comes that in electrolysis, especially when the electrolyte—the fluid undergoing electrolysis—is blood, the clot formed around the positive pole is small and dense, while that around the negative pole is large and flabby. Knowing, as we do, that oxygen, chlorine and the acids are liberated at the positive pole when electrolysis is performed on the tissues of the body, and also knowing that hydrogen and the alkalies are liberated around the negative pole, we have only to apply our knowledge of the action of the acids and alkalies respectively on the blood to explain the observed phenomena. The occurrence of uterine hæmorrhage does not contra-indicate the use of the method.

One of his patients, suffering from menorrhagia, came to his office, stating that she was drenched with the discharge and came for relief, as it was much easier for her to come to his office than to go home. The excessive flow did not occur until after she came down town. Dr. Hayes used the intra-uterine electrode connected with the positive pole, and allowed a current of from 60 to 80 milliamperes to pass for eight minutes. The patient then went home a distance of three miles and was in bed the remainder of the day. The next day she was about the house and the flow had nearly ceased. This period was by far the least severe she had had in several months, and the amount of time spent in bed was three-fourths less. The flow was diminished in like amount. Should opportunity again offer itself to

use Apostoli's method during a non-puerperal hæmorrhage, Dr. Hayes said he would not hesitate to use it as the best means of securing its arrest.

OFFICERS FOR 1891.

President, Dr. Robert Battey, Rome, Ga.

First Vice-President, Dr. E. T. Camp, Gadsden, Ala.

Second Vice-President, Dr. Richard Douglas, Nashville, Tenn.

Third Vice-President, Dr. D. H. Howell, Atlanta, Ga.

Secretary, Dr. Frank Trester Smith, Chattanooga, Tenn.

Treasurer, Dr. B. S. Wert, Chattanooga, Tenn.

On motion, the Association adjourned to meet in Chattanooga, Tenn. (date to be decided on), 1891.

SELECTIONS.

PEROXIDE OF HYDROGEN AND OZONE—THEIR ANTISEPTIC PROPERTIES.

BY DR. PAUL GIBIER,

Director of the Pasteur Institute of New York.

Read before the International Medical Congress, held at Berlin, Germany, August 7, 1890.

Since the discovery of peroxide of hydrogen by Thenard, in 1818, the therapeutical applications of this oxygenated compound seem to have been neglected both by the medical and surgical professions; and it is only in the last twenty years that a few bacteriologists have demonstrated the germicidal potency of this chemical.

Among the most elaborate reports on the use of this compound may be mentioned those of Paul Bert and Regnard, Baldy, Pean and Larrive.

Dr. Miguel places peroxide of hydrogen at the head of a long list of antiseptics, and close to the silver salts.

Dr. Bouchut has demonstrated the antiseptic action of peroxide of hydrogen, when applied to diphtheritic exudations.

Prof. Nocart, of Alfort, attenuates the virulence of the symptomatic microbe of carbuncle, before he destroys it, by using the same antiseptic.

Dr. E. R. Squibb, (*Gaillard's Med. Jour.*, March, 1889.) of Brooklyn, has also reported the satisfactory results which he obtained with peroxide of hydrogen in the treatment of infectious diseases.

Although the above-mentioned scientists have demonstrated by their experiments that peroxide of hydrogen is one of the most powerful destroyers of pathogenic microbes, its use in therapeutics has not been as extensive as it deserves to be.

In my opinion the reason for its not being in universal use is the difficulty of procuring it free from hurtful impurities. Another objection is the unstableness of the compound, which gives off nascent oxygen when brought in contact with organic substances. (The peroxide of hydrogen that I use is manufacturnd by Mr. Charles Marchand, of New York. This preparation is remarkable for its uniformity in strength, purity and stability.)

Besides the forgoing objections the surgical instruments decompose the peroxide, hence, if an operation is to be performed, the surgeon uses some other antiseptic during the procedure, and is apt to continue the application of the same antiseptic in the subsequent dressings.

Nevertheless, the satisfactory results which I have obtained at the Pasteur Institute of New York with peroxide of hydrogen, in the treatment of wounds resulting from deep bites, and those which I have observed at the French clinic of New York, in the treatment of phagedenic chancres, varicose ulcers, parasitic diseases of the skin, and also in the treatment of other affections caused by germs, justify me in adding my statement as to the value of the drug.

But, it is not from a clinical standpoint that I now direct attention to the antiseptic value of peroxide of hydrogen. What I now wish is merely to give a full report of the experiments which I have made on the effects of peroxide of hydrogen upon cultures of the following species of pathogenic microbes: Bacillus anthracis, bacillus pyocyaneous, the bacilli of typhoid fever, of Asiatic cholera, and of yellow fever, streptococcus pyogenes, micro-bacillus prodigiosus, bacillus megaterium, and the bacillus of osteomyelitis.

The peroxide of hydrogen which I used was a 3.2% solution, yielding fifteen times its volume of oxygen; but this strength was reduced to 1.5%, corresponding to about eight volumes of oxygen, by adding the fresh culture containing the microbe upon which I was experimenting. I have also experimented upon old cultures loaded with a large number of the spores of the bacillus anthracis. In all cases my experiments were made with a few cubic centimetres of culture in sterilized test-tubes, in order to obtain accurate results.

The destructive action of peroxide of hydrogen, even diluted in the above proportions, is almost instantaneous. After a contact of a few minutes, I have tried to cultivate the microbes which were submitted to the peroxide, but unsuccessfully, owing to the fact that the germs have been completely destroyed.

* * *

I am now experimenting upon the bacillus tuberculosis, and if I am not deceived in my expectation, I will be able to impart to the professiom some interesting results.

It is worthy of notice that water charged, under pressure, with fifteen times its volume of pure oxygen has not the antiseptic properties of peroxide of hydrogen. This is due to the fact that when the peroxide is decomposed nascent oxygen separates in that most active and potent of its conditions next to the condition, or allotropic form, known as "ozone." Therefore it is not illogical to conclude that ozone is the active element of peroxide of hydrogen.

Before concluding I wish to call attention to a new oxygenated compound, or rather ozonized compound,

which has been recently discovered and called "glycozone" by Mr. Marchand.

This glycozone results from the reaction which takes place when glycerin is exposed to the action of ozone under pressure—one volume of glycerin with fifteen volumes of ozone produces glycozone.

It has been demonstrated in Pasteur's laboratory that glycerin has no appreciable antiseptic influence upon the virus of hydrophobia; therefore, I mixed the virus of hydrophobia with glycerin, and at the expiration of several weeks all the animals which I inoculated with this mixture died with the symptoms of hydrophobia.

On the contrary, when glycerin has been combined with ozone to form glycozone, the compound destroys the hydrophobic virus almost instantaneously.

Two months ago, a rabbit was inoculated with the hydrophobic virus, which had been submitted to the action of this new compound, and the anima is still alive.

I believe that the practitioner will meet with very satisfactory results with the use of peroxide of hydrogen for the following reasons:

1. This chemical seems to have no injurious effect upon animal cells.

2. It has a very energetic destructive action upon vegetable cells—microbes.

3. It has no toxic properties; five cubic centimetres injected beneath the skin of a guinea-pig do not produce any serious result, and it is also harmless when given by the mouth.

As an immediate conclusion resulting from my experiments, my opinion is, that peroxide of hydrogen should be used in the treatment of diseases caused by germs, if the microbian element is directly accessible; and it is particularly useful in the treatment of infectious diseases of the throat and mouth.—*Med. News.*

VERTIGO.

In the Section on Practice, Virginia Medical Society, Dr. Landon Carter Gray, of New York City, read a paper on this subject, in which he said that an important generic distinction between vertigo of organic disease and that of a functional nature is that the former is attended by less irritability and apprehension on the part of the patient than the functional form. Kidney, heart, and organic liver troubles causes slight vertigo, lasting only a short time. In vertigo, due to kidney disease, the headache sometimes disposes to hebetude or coma—occasionally convulsions; there may be œdema also. In vertigo of organic liver disease, there is usually some degree of hebetude or jaundice or dropsy. Vertigo due to brain lesions will prove pathognomonic. Thus *cerebellar* vertigo causes "tibulation," or one-sided staggering gait, or sudden semi-circular whirling. According to Dana, temporal lobe lesions may produce like symptoms. Spinal lesions are not apt to cause more than slight vertigo; in locomotor ataxia, dizziness may accur when the patient's eyes are closed. Middle ear and labyrinthal diseases also cause vertigo.

But there is a chronic vertigo, varying from a sudden sensation of a loss of equilibrium to dread of going about, often attended by symptoms of other nervous disturbance, such as tingling of extremities, fulness about head, usually felt most at the vertex, with slight aural ringing, mild insomnia, irritability, etc. It is most common in young and middle-aged adults, and is most frequent, in Northern climates, in the first warm months of the year. In severe cases, even going from a cold into an over-warm room will induce an attack. Neurasthenia is common. Tongue is usually unaffected, but there is generally an excess of uric acid or oxalate of lime in the urine. Hence, Murchison gave to the symptom group the name, lithæmia. But Dr. Gray said many cases do not present evidence of liver trouble; nor is there a standard by which to judge of an excess of uric acid in the system; and again cholagogues often aggravate the vertigo as well as nervous symptoms. He said that generally this peculiar form of vertigo is due to some chronic and persistent error of digestion—either of the nitrogenized or starchy elements of food or of both. Constipation, without coated tongue or foul breath, is common in this form of digestive disease. Predispositions to gout or rheumatism seem to cause such trouble; but the exciting causes of the vertigo are mental or physical over-strain, great anxiety, malaria, very sedentary life, etc.

Therapeutically, in those not having neurasthenia, he gives 20 drops of dilute nitro-muriatic acid, before meals, in a wine glass of water, and also one drachm of fluid extract, or two grains of solid extract of cascara sagrada three times daily—reducting the dose if it causes more than two feculent stoolls a day. Interdict all red meat diet. In about ten days the patient will feel better generally, but the vertigo will still be unaltered. Then stop the acid, and instead, given the best pepsine and pancreatine—pepsine immediately after meals, and pancreatine an hour and a half later. After a time, gradually return to meat diet, but only once a day. In neurasthenic cases, in addition to this treatment,require the patient to take absolute rest—even sometimes in bed for two or three weeks. It is better to err on the side of enforcing too much than too little rest in these cases. In so radically differing from others with reference to the treatment of this chronic form of vertigo, he has only to say that his experience has taught him to so differ.—*Va. Med. Monthly.*

REMARKS UPON THE ANTEFLEXION OF THE UTERUS.

By Dr. George Tucker Harrison. The normal position of the uterus in the erect woman, when the bladder and the rectum are empty, is that of anteversio flexion— the point of flexion being at the junction of the cervix and body. But when the bladder is distended, the uterus is lifted up physiologically, and its posterior wall lies in juxtaposition with the anterior wall of the

rectum; it is both retroposed and retroverted. While the bladder is being emptied, the fundus uteri describes an arc, which corresponds to an angle of from 45 to 60 degrees. The characteristic features of pathological anteflexion is simply the stability of the flexion. The causes which make the flexion permanent, are either in the organ itself, or operate on it from without. Metritic infarctions belong to the first class of causes, while parametritis posterior, or parametritis chronica atrophicus,or perimetritis belong to the second and more frequent and permanent in effects class of causes. When metritis attacks an anteflexed uterus, the angle which, up to that time, has been variable, becomes fixed. The symptoms usually associated with anteflexion, are dysmenorrhœa and sterility. This painful dysmenorrhœa is not mechanical, but is due to the associated metritis. The sterility, also, is attributable to the accompanying endometritis, oophoritis and perimetritis. If these inflammations are removed and if the perimetritis has left no permanent pathological changes, conception may ensue, notwithstanding the existance of parametric cicatricial tissue or permanent anteflexion. The diagnosis of this pathological anteflexion depends alone on the demonstration of the stability of the flexion. Bimanual palpation, or the establishment af the fact that the anteflexion persists even when the bladder is distended, or the discovery that the folds of Douglas' sac are shortened, are the means for deciding whether or not as to the durability of the flexion. As to treatment, it is of prime importance to try to remove the parametritis posterior or perimetritis and results. If the uterus is supersensitive, scarify it just prior to menstruation, and the dysmenorrhœa will be moderated. For the persistent uterine catarrh, wash out the uterine cavity with a solution of carbolic acid after dilatation with aseptic laminaria tents, followed by steel dilators. Lately he has been very much pleased with ichthyol, incorporated with lanolin, applied around the portio vaginalis, in clearing up old peri- and para-metric adhesions.—*Va. Med. Monthly.*

THE TREATMENT OF CHRONIC BRONCHITIS.

The inhalation of steam alone night and morning helps the expectoration, but the addition of compound tincture of benzoin, creasote, eucalyptus or carbolic acid in small amounts, adds considerably to the value of the method of treatment. If one drug seems too irritating, another may be tried. The patient must be induced to give this plan a fair trial, but must be directed not to employ the inhalation too long at one time, as faintness may be induced. Here should be mentioned the sprays of various medicaments. The drug most frequently employed is ipecacuanha wine, either pure or diluted with once or twice its bulk of water. Simple spray apparatus may be used with the ipecacuanha wine, and the patients should be directed to inhale the spray as given off. At first there may be some involuntary resistance to the entrance of the drug into the lungs; but as the patient gains confidence, it no doubt enters freely into the air vesicles. The number of inhalations required in most cases of chronic bronchitis ranges from four to eighteen, and they should be given daily. The effect of ipecacuanha is said to be increase of the secretion. In small doses it depresses blood pressure but little, while it stimulates ciliary action and that of the respiratory centers. Tartar emetic spray (one grain to an ounce of water) has also been used; it produces the same effect as the ipecacuanha wine, but is less satisfactory. Lobelia spray is sometimes employed, especially when there is much spasm. Iodide of potassium spray (2% solution) is also of much use.

Counter-irritants seem to be of great value in chronic bronchitis, and the author has great faith in the linimentum terebinthinæ aceticum (B. P.) well rubbed into the chest night and morning. Others use linimentum iodii, with the idea that it is not only an active counter-irritant, but that it is also good when inhaled, iodine having been strongly recommended as an inhalation in bronchitis.

The best expectorant is carbonate of ammonium given in doses of five grains of the salt with infusion of senega or serpentaria, or with aromatic spirit of ammonia, ipecacuanha wine and compound tincture of camphor. Chloride of ammonium is also of much service. Terebene, in the author's experience, gives relief but he has not found it of as much value as carbonate of ammonium. Emetics are often very serviceable in cases with excessive secretion which is not easily expectorated.—Dr. Harris, in *London Lancet.*

TEN GOOD THINGS TO KNOW.

1. The milk which is turned or changed may be sweetened and rendered fit for use again by stirring in a little soda.

2. That salt will curdle new milk; hence, in preparing milk porridge, gravies, etc., the salt should not be added until the dish is prepared.

3. That fresh meat, after beginning to sour, will sweeten if placed out of doors in the cool of night.

4. That clear, boiling water will remove tea stains and many fruit stains. Pour the water through the stains and thus prevent it spreading over the fabric.

5. That ripe tomatoes will remove ink and other stains from white cloth, also from the hands.

6. That a tablespoonful of turpentine boiled with white clothes will aid the whitening process.

7. That boiled starch is much improved by the addition of a little sperm salt or gum arabic dissolved.

8. That beeswax and salt will make rusty flat-irons as clear and smooth as glass. Tie a lump of wax in a rag and keep it for the purpose. When the irons are hot, rub them first with the wax rag, then scour with a paper or cloth sprinkled with salt.

9. That blue ointment and kerosene, mixed in equal proportions and applied to the bedsteads, is an unfailing bedbug remedy, as a coat of whitewash if for the walls of a log house.

10. That kerosene will soften boots or shoes that have been hardened by water and render them as pliable as new.—*Hall's Journal of Health.*

DANGERS OF SALIVATION FROM CALOMEL AND ACIDS.—

1. All the alkaline chlorides are incompatible with calomel, and we should, therefore, forbid all salt food after a dose of calomel has been given.

2. In certain diseases calomel is prescribed in fractional doses at the same time that the patients is taking iodide of potassium; now, as this salt causes the conversion of chloride into the bichloride, it is the wiser course not to have the two drugs together in the stomach.

3. Calomel should never be prescribed in the same mixture with preparations containing hydrocyanic acid, such as cherry-laurel water and the like.

4. Some forbid all acid drinks after a dose of calomel has been taken; but as acids convert this salt into the bichloride only when they are in concentrated hot solutions, this precaution seems hardly worth observing.—*Med. Record.*

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE.

FOR THE THREE WEEKS ENDED NOVEMBER 15, 1890.

Carter, H. R., P. A. Surgeon. Granted leave of absence for 15 days. Nov. 14, 1890.

Guiteras, G. M., Ass't Surgeon. Granted leave of absence for 30 days. Oct. 29, 1890.

Hussey, S. H., Ass't Surgeon. To proceed to South Atlantic Quarantine Station for temporary duty. Oct. 28, 1890.

Geddings, H. D., Ass't Surgeon. Granted leave of absence for 14 days. Nov. 14, 1890.

Groenevelt, J. F., Ass't Surgeon. To report to the Supt. of Immigration for temporary duty. Oct. 28, 1890.

ERRATA.—In Dr. Dunklin's paper of November 1, page 346, second column should read: "Assuming of course that the physiological condition of menstruation goes on in a normal and uninterrupted way, no pathological condition of the uterus results from menstruation; but when a normal menstruation is interfered with," etc.

Page 347, first column, should read "chlorine and the acids," not chloride.

In same column, should read "and will require more cells," not calls.

Same column last line should read "The binding post."

USEFUL FORMULÆ.

BRONCHIAL ASTHMA.—

℞ Iodide of ammonium, - - dr. ij.
Fl. ext. grindelia robusta, - - ℥ ss.
Fl. ext. glycyrrhiza, - - dr. iv.
Tinct. lobelia,
Tinct. belladonna, - - aa dr. ij.
Syr. Tolu., - - - q. s. ad. ℥iv.

Dose.: Teaspoonful three times a day; extra doses during a paroxysm.

This formula may be varied to suit indications. I have cured many cases of asthma by means of it, some of over twenty years' standing, myself among the number.—Dr. Covert, in *Am. Med. Jour.*

SUBSTITUTE FOR IODOFORM.—

℞ Zinci oxidi, - - - - ℥ ij.
Hydrarg. chlor. corros., - - - gr.j.

M. Subject the oxide of zinc to a temperature of 100°F. for a few hours before mixing, then mix when cool and place in air-tight box until ready to use it. This is thoroughly antiseptic and does not possess the disagreeable odor of iodoform.—Dr. Benjamin, in *Med. World.*

FOR BRONCHITIS.—

℞ Tincture veratri viridis, - - ♏ xv.
Syrupi ipecacuanhæ,
Spiritus ætheris nitrosi, - aa fl℥ss.

M. Sig.: Fifteen drops every three hours. (For a child one or two years old.)

℞ Pulveris ipecacuanhæ, - - gr. vj.
Pulveris myrrhæ, - - - gr. xij.
Potassii nitratis, - - - ʒ ss.

M. et divide in parts vj.

Sig.: One every fourth hour. (For elderly persons.) —B. F. Schneck, in *Med. World.*

TONSILLITIS.—The following has been a very useful gargle in the treatment of tonsillitis, and is highly recommended:

℞ Tr. guaic. ammoniat.,
Tr. cinchonæ comp., - - aa fʒiv.
Potassii chlorat., - - - ʒij.
Pulv. acaciæ, - - - - q.s.
Aquæ, - - - - q.s. ad. f℥iv.—M.

Sig.: Use as a gargle, and take a teaspoonful every two hours.—*Med. Cal.*

PAPAIN IN DIPHTHERIA.—Dr. J. B. Richardson, of Louisville, Ky., advises the following in diphtheria:

℞ Papain, - - - - - ʒij.
Hydronaphthol, - - - gr.iij.
Acid hydrochlor. dil., - - gtt.xv.
Aqua destil., - - - ad ℥xxxij.

M. ft sol. Sig.: Use carefully and thoroughly, by means of hand atomizer, every half hour on throat, and through nostrils on posterior nares and pharynx, if deposit extends to these localities.—*Med. Standard.*

ORIGINAL ARTICLES.

DIET.

BY ROBERT F. BROOKS, M.D., CARTHAGE, MO.

Read before the Southwestern Missouri District Medical Society, Springfield, October 13, 1890.

The subject Diet is a very trite one, indeed, but it is very interesting, nevertheless, to the practitioner of medicine. Very many of our patients are dyspeptics, and many have gastric or intestinal catarrhs, while others easily become bilious. To all these we must minister, and we should be able to give directions as to proper diet, and should impress its great importance. All of us have had disagreeable experiences with patients who neglect to follow directions. I treated a boy about 10 years old for ague. He begged his brother to buy him bologna sausage, saying he longed for it. The boy ate a pound of it while being dosed with quinine. He ate this at one meal. His folks were alarmed for him. It did not hurt him, however, and he recovered from the ague.

A man, æt. 30 years, was convalescing from a long and severe attack of typhoid fever. He was so hungry! And in his wife's momentary absence from the room, he crawled from his bed to the cupboard and got a pound of boiled pork, which he gorged at once. It made him quite free from hunger for several days. This makes me think of the morbid hunger we sometimes have to treat in fevers. In enteric fevers, diarrhœas, dysentery and kindred affections, I have been afraid to allow solid food, especially meats. I have had considerable difficulty, sometimes, to control my patients. A young man having enteric fever insisted on being allowed food. As I forbade it he was mad, and never would pay me anything for my services. It is not uncommon for children to call for solid food in fevers. As a rule, it should not be allowed. Should you try it, you ought to commence with a little light bread and butter.

It is easy to tell your patient with Bright's disease to lie down constantly, and drink only skim-milk, and to eat no solid food. But the man soon tires of the milk, and will have something else. I have tried sweet milk, sour milk, butter-milk, milk-soups with crackers or bread, and have thus been able to carry the sick man along. If a certain set of doctors confine their patients to a diet of meat and hot water, it is because milk is not agreeable, or that the intestinal digestion is poor, and can not dispose of much starch or sugar. Some one discovers that a certain article agrees with him, and persuades others to try his plan. An article of diet becomes fashionable. It may be good for some and not for others.

I had a middle aged patient who had great dyspnœa on exertion. He grew worse, gradually. He could not sleep in the room where his wife was lying sick with consumption, as he could not get his breath. This man was quite fat. He had a little rheumatism at times. He claimed to have perfect digestion; his stomach never troubled him. He drank some whisky. I could only find normal beats of the heart, no enlargement, no albumen in the urine. I guessed he had an overlay of fat around the heart. He went to St. Louis, and was told that he did have too much fat around his heart. I wanted to confine him to a meat diet, and would have limited that, too. However, he went off to Colorado, to the mountains, and practised mountain climbing. He restricted his diet some, but walking so much reduced his flesh. He returned and has been quite well ever since.

I had not then read of the cure of such affections in the mountains, and told him he must not go, as his weak heart would fail. He went, all the same, and got well.

It is a good plan for a doctor to inquire about what the breakfasts, dinners and suppers consist of, so as to be able to give warnings when certain articles should be withheld. I have noticed that dyspeptics are sometimes lean, while on the other hand, they may be very fat. The fat is of no advantage, but is in fact detrimental. I think in these cases if we could withdraw most of the starch and sugar from the diet, and use more meats and milk, it would be better. (Ziemssen, Therapeutics, Vol. I., p. 32). It was formerly assumed that 240 parts of starch were of the same value as 100 of fat, because for the conversion of these proportions of the two bodies, the same quantity of oxygen is necessary. According to Pettenkofer and Voit, this assumption is incorrect, since experiment shows that in the living organism 175 parts of starch are in the material actions approximately equivalent to 100 of fat.

If you will notice children who are very fat, you will often find eczema. To cure this one has to use a careful diet; as these children have great hunger, they must be fed on as digestible food as possible, plain bread and butter with milk, and have light suppers. In enterocolitis sucklings are continually held to the breast in order to quiet them. Mothers think it cruel and barbarous to deny them. I dictated the times of nursing to a child's mother. She said she would follow my direction, but she feared her child would starve.

She was faithful, however, and her child got well. How many mothers, in your practice, know that frequent sucking makes the curd of the milk hard and indigestible? How many know that an interval of two or two and a half hours in day-time, and three or four at night, is the best for the child, and, in the long run, for the mother, as the child will recover from its colic and sleep well? (Keating's Chil., Vol. I, p. 274.) "Irregularity in nursing, frequent nursing, and too prolonged intervals, often so disturb the quality of the human breast milk, as to transform a perfectly good milk into one entirely unfitted for the infant powers of digestion." "Too frequent nursing lessens the water and in-

creases the total solids; too prolonged intervals render the milk too watery."

As to feeding infants, milk is the safest and best. In older children, infant foods are full of snares. If cow's milk is sufficiently diluted, with proper quantity of sugar and cream added and the mixture is rendered somewhat alkaline ($^1/_{16}$ limewater) it is next best to human milk. Patent foods are unnecessary. (Keating, Vol. I, p. 313). Predigested food, with extract of pancreas and soda, must only be used a little while. It is better to use milk sugar than cane-sugar. (Ibid, p. 325, 328.) "Milk, 1 oz.; water, 5 oz.; cream (20% fat), 1½ oz.; limewater, ½ oz., makes a proper food for infants, and nearly like mother's milk." Fat is necessary for digestion and nutrition, prevents constipation and keeps the bowels open. This very day I saw a child, æt. 18 months, very pale, feeble, fretful and emaciated; it has had entero-colitis for four months, or since it was weaned. The doctor told the mother to give it "foods," as the mother insisted that her baby wouldn't eat cow's milk. As it is now tired of "foods" she is giving it milk with tea and rare beef-steak! We can fancy how much better the child would be to-day, if it had been kept mostly on milk, with some condensed milk, or milk flavored with a little tea or coffee. This doctor was very ignorant, or he was afraid to offend by telling the truth.

Our patients complain that milk makes them bilious, or they are unable to eat fatty articles of food and be comfortable. Many times we have to refrain from giving cod-liver oil because of the bilious state. The oil, if persisted in, will make a thicker coat on the tongue, and diminish a failing appetite. If a certain diet, with assistance of drugs, will clean the tongue and strengthen the stomach, we can, perhaps, use the oil with great advantage. We all agree that a plain diet, quantity also restricted, will benefit; but how many of you would use mercurials as an adjuvant? How many will doubt their utility, magnify their danger, and back up their opinion by telling what a certain Edinburg committee found out by experiments on dogs—that mercury is not a cholagogue!

H. C. Wood, in his Therapeutics (7th Ed. 1888), declares that "their experiments do not warrant the further conclusion that mercury does not increase the flow of bile in healthy dogs" (p. 670). He says (p. 685) that mercurial purgatives, given to healthy persons, caused "the escape of large quantities of bile." "Mercurials have the power of directly or indirectly increasing the secretions of the bile." The liver (Brunton, p. 399) seems to destroy the poisonous qualities of peptones, possibly tissue waste. Drugs acting on the liver stimulate or depress, or act as cholagogues; the latter remove the bile from the body (ibid., 375). It is probable that the malarious poison circulates in the bile, and possibly it is true of the poisons of other fevers (ibid, p. 400). The bile is formed in the liver, and may be absorbed into the blood (p. 401). The liver stores, excretes and destroys poisons to the body—for example, nicotine, conine, cobra poison and hyoscyamine (p. 402). Whether peptones, which are themselves poisonous, or ptomaines, causing languor and weakness in the digestion, they are prevented by the liver from entering the general circulation. Bile lessens the power of the heart and appears to diminish the activity of the brain (p. 407). Persons suffering from biliousness have an icteric tinge of the conjunctiva, and are apt to feel irritable, stupid and out of sorts generally. In biliousness, then, we will be greatly assisted by the judicious use of mercurials.

Pavy recently (*Times and Register*, Sept. 13, 1890) lectured on diabetes. He claims that the sugar harms by its presence in the blood. The more sugar the worse for the patient. He gives opium as a restorative of the assimilative power of carbo-hydrates. Pavy says the change of starch is hardly carried higher than maltose in the alimentary canal, preparatory to absorption; much is only carried as a dextrin; calling glucose 100, some of the sugar in the portal circulation is as low as 21.

I had under observation for several months a young officer who had a mild diabetes. His diet was restricted as much as possible from the use of carbo-hydrates. It was very hard for him to diet himself, but he did so with commendable determination. He got a good deal better while I was treating him.

I have had considerable difficulty in directing the diet in pregnant women whose morning sickness developed into such weakness of the stomach that almost everything was rejected. In these cases my plan is to recommend continual recumbence and a diet of milk and lime-water. If no work is done, and the stomach is rested a good while, you can begin the use of solid foods.

For cases of plethora in those leading sedentary lives, use no alcohol, very little meat, with variety of well cooked vegetables; but in cases of debility or age, I think alcohol in small doses a sort of food, and may be used with advantage. The laity use alcohol with bitters to stimulate the appetite and hold them up. Of course we know that alcohol on an empty stomach, except just before meals, is injurious even in small quantities; and it has been my experience that alcoholic bitters do little good, more often irritate the stomach, producing a catarrhal state. In case we give alcoholics as a food at meals, we should commence with small trial doses, satisfying ourselves that it is a benefit before continuing it long; neither should we allow the dose increased, nor have it used except at set times. Only in this way can we prevent a habit growing and leading to inebriety.

You have doubtless heard of people who have drunk fresh blood to restore them to health. I knew of a lady in our city who went to the slaughter house daily to get her drink of blood. This seems a nauseous addition to one's diet, and few can be found determined enough to use it. The U. S. Dispensatory of 1883 says dried bullock's blood has been used considerably in Europe, and that even drinking fresh bullock's blood has come, to some extent, in fashion.

Dr. Stewart used to defibrinate and dry bullock's blood, but several months ago he perfected a method of preserving defibrinated blood, using glycerine, whisky and malt; I have been using this preparation, which is called hæmoglobin compound, for some time now. I have used it in the heated term, among my patients who would take cod-liver oil in cooler weather, and have given it to those debilitated for any cause. So far I have been pleased with it. With a few it did not agree. I commenced with a small teaspoonful after meals, and increased, if necessary, to a tablespoonful.

I have lately given it to an old lady, very low from a fever. It agreed nicely, and in that case did not irritate the bowels as did preparations of iron that I had been giving her.

I have not tried forced feeding, which we know has been successful in the hands of Dr. Mitchell and oth ers. On the other hand, I have been restricting the food a great deal, or changing it so that blander articles would be used. The caprices of people are infinite. Many a time you are able to suggest this or that, but your patients will not want it. They crave fried potatoes, roast beef, ham, fresh pork or some other improper things. Articles like thickened milk, *i. e.*, flour boiled in milk, corn-meal gruel, oat-meal, corn bread, etc., are very apt to be underdone. It is always well to speak of this. It is better to have your fish or meats smothered or stewed, than fried or broiled. Never have butter cooked with meats of any kind, as it upsets a good stomach, but have it added to the meats after cooking is finished. I think batter cakes, nicely and well done, with butter on them, are more digestible than wet toast, or milk toast, or in fact bread soaked in any liquid. Dry toast with butter or jelly is best eaten without washing it down. People do not appreciate the importance of mastication. I would not allow milk, eggs, fish and meat at once, but only one of these articles at a time, that is, at a meal. Many persons use milk as they ought to use water at meals. It is hurtful. Adding a glass of milk and a lot of batter-cakes to a meal is gormandizing. Better eat fewer things. One is not then tempted to overload the stomach so much. Many children are too fond of meats and sweets, which is also true to some extent of adults. These should be taught what to eat.

Physiology (Dalton, p. 139, VII Ed.) teaches that digestion is a hydration of food; glucose is hydrated starch; peptones are hydrated albuminoids; while fats (Ziemssen, ibid, 123) are moistened by the bile, so that they can be readily absorbed. No great change takes place in food, either physically or chemically. You can not explain absorption by the phenomena of osmosis (Ziemssen, ibid, p. 133), or by a positive pressure within the intestinal canal. Absorption is a vital act, the function of the epithelial cells of the mucous membrane. These epithelial cells must be living to do their work, and do not work as machines. Such being the case, we must study the habits and experiences of men. The art of cooking demands our careful attention, and should be one of our studies.

TREATMENT OF GANGRENOUS WOUNDS AND DISEASES.

BY BEDFORD BROWN, M.D., ALEXANDRIA, VA.

Synopsis of a paper read before the Southern Surgical and Gynæcological Association, at Atlanta, Ga., November 11, 1890.

Many years ago, previous to the late war, I determined to institute a series of experiments to ascertain the capability of local and general treatment of gangrenous affections and wounds, either for the prevention or arrest of extensive gangrene. The object was to find local agents possessing active properties as stimulants of vital action in the affected parts; also as means of disinfecting and deodorizing gangrenous sloughs and hastening their final separation and the establishment of a healthy basis for granulation. In cases coming under my care I found that the deodorizers of the time failed to accomplish these objects. I then employed a concentrated solution of zinc sulphate and dilute sulphuric acid as a local application, which seemed to meet all the requirements. The first case in which it was applied was according to the following formula:

℞	Zinci sulphatis, - - - -	℥j.
	Aquæ, - - - - - -	Oj.
	Acid sulph. dil., - - - -	℥ss.—M.

After the free application of hot water, this solution was applied over the gangrenous parts on raw cotton. In the course of two or three days the sloughs separated rapidly, leaving a perfectly clean healthy basement for granulation. This solution evidently possesses active antiseptic properties. It is an admirable deodorizer. It is clean and cleanses the parts effectually. In cases of great loss of sensibility in the parts, weak circulations, reduction of vital action, I know no agents better calculated to arouse vaso-motor action and dormant vitality, for as soon as the sloughs are removed and the living basement exposed, it gives rise to intolerable pain. I have used this solution in all forms of gangrenous affections and wounds, some limited, others extensive and associated with septicæmia, with benefit. It possesses no caustic property, but it contracts and shrinks the sloughing tissue, rapidly hastening the separation while the action on the living tissue is to stimulate renewed action and sensibility where the capillary circulation is languid, the vaso-motor action sluggish, the circulating blood about to become stagnant. During the late war and since that time, I have had frequent opportunities of using this preparation. It was cheap, abundant, easy of application and exceedingly cleanly, and did good service in my field hospital practice in the Confederate Army. Another most admirable antiseptic disinfectant and stimulant of vital action found by me invaluable in the local treatment of gangrene, is bromine, in solution. In cases of infectious gangrenous inflammation when the process is propagated by an infection, as in hospital gangrene or gangrenous erysipelas, bromine is particularly applicable, as it destroys the infection, subdues the peculiar infec-

tious inflammation, and in this way prevents modification. However we may differ in regard to the peculiar nature or form of infection that causes gangrene of the infectious variety, it is a fact well established that bromine is a powerful corrective of this infection. I have in too many instances seen it arrest gangrenous inflammation, destroy the infection, and arrest the process of gangrene, to doubt it for a moment. I have had these applications used alternately in cases of sloughing wounds or diseases with benefit. I have used hot water applications from 110° to 120° in all classes of gangrenous wounds and diseases with much benefit.

Sterilized water at this temperature is usually more agreeable, pleasant and grateful than otherwise to the gangrenous parts. Cool application are unpleasant because of the chilliness they create. In one case the patient demanded hot applications and was not satisfied when the water was below 130°. I have used hot water now termed "sterilized" water applications in unhealthy wounds, with feeble circulation and reduction of nervous and vaso-motor action previous to or after the development of gangrene or sloughing, for more than forty years, both in civil and military practice; and during the late war in my field hospitals I saw this practice thoroughly tested and applied in the surgical practice of my preceptor, the late distinguished Dr. Benjamin W. Dudley, of Lexington, Ky. He applied hot water that had been boiled and then reduced to the proper temperature to all wounds of an unhealthy character, and to all sloughing wounds, always with benefit. I found in military practice that hot water applications aided greatly in establishing reaction in wounds accompanied with reduced vascular action and low temperature. In wounds tending to gangrene or sloughing there are few better stimulants of vital action than hot water applied in this manner.

In the practice of Dudley, I have repeatedly seen hot water that had been boiled and reduced to 105°, then to 110°, applied to and in the eye in violent cases of purulent ophthalmia, every hour for fifteen minutes each time, not only subdue engorgement and inflammation, but prevent that most untoward misfortune, sloughing of the cornea. Indeed with the exception of mercurial cathartics this was his sole treatment of these cases. I have never seen sloughing of the cornea where this method of practice was faithfully carried out. The death of the tissues in gangrene arises either from obstruction of the arterial circulation from diseased or artificial causes, from infection acting as a destructive agent on the blood constituents in the wounded part, as in hospital gangrene or erysipelas, or total paresis of the vaso-motor nerves in the wounded structures from the shock of injury in the form of a laceration, as in gunshot, railroad or other injury of destructive kind. Thus we rarely see gangrene from an incised, clean-cut wound, but it follows when parts are crushed, lacerated, ground or torn, and extensive damage to the vaso-motor nerves of the part is sustained. Hence one of the grand objects in the treatment of gangrenous wounds and diseases is to improve the state of the blood, to strengthen the circulation, arterial and capillary, and if possible maintain them as nearly at a normal standard as possible. Hence the importance of general sustaining treatment. An abundance of nutritious food, alcoholic stimulants, invigorating and vitalizing remedies I have seen in army practice tide over apparently forlorn cases that would otherwise have died. Gangrenous patients, provided the stomach is in good condition, can take large quantities of alcoholic stimulants with benefit. I have given ten grains of ammon. carb., and two ounces of whisky every one or two hours with marked benefit in establishing reaction. In those cases of gangrene arising from embolism of a leading artery, I have found carbonate of ammonia in large doses, strychnia, nitroglycerine and the tincture of iron, the best combination for establishing a collateral circulation, when given in connection with alcoholic stimulants and highly nutritious food. In cases occurring in my practice of several years, of gangrenous affections or wounds, I have found nitroglycerine in doses of the fiftieth or one-hundredth of a grain, every three hours, in connection with the remedies mentioned, act well in sustaining the action of the heart and invigorating the vaso motor system. In cases where the action of the heart is feeble, the system threatened with collapse either from vaso-motor shock or from the poison of septicæmia, the nitro glycerine acts well as a means of sustaining the circulation until reaction. I have found this method of managing the septicæmia of gangrenous affections the best. There is no internal antidote to the poison of pyæmia or septicæmia from gangrene. All that we can hope from internal medication or regimen is to promote blood formation, sustain the nutritive functions and maintain the action of the great sympathetic system. Antisepsis must come alone from local treatment. There is the field, the theater of action for the application of antiseptic agents, and the practice of antisepsis. I believe from past experience that a vast amount may be accomplished in that way to prevent or create septicæmia. I have observed in sloughing affections that as soon as disinfection of the diseased tissues by the action of bromine or the zinc and sulphuric acid solution, has been effected, the vital condition of the parts improved even to a limited extent, the condition of the general system responds readily and promptly, and not before. Hence in treating the sepsis of gangrene we must ever be active and busy in our work of disinfecting, cleansing, and stimulating vital action of the local lesion. Nevertheless it is too true that a considerable proportion of gangrenous affections prove fatal under all methods of treatment when there is utter paresis of the vaso-motor system and profound infection from sepsis. For the purpose of more clearly illustrating the views presented in his paper, Dr. Brown here cited the history of several cases of different kinds of gangrenous affection treated by the various methods mentioned.

The last case is appended:

Gangrenous carbuncle. In this case the carbuncle was very large, covering the whole of the back of the neck. All the tissues down to the spinous processes of five cervical vertebræ were gangrenous.

The most concentrated solution of sulphate of zinc and dilute sulphuric acid was applied over the carbuncle by means of absorbent cotton continuously, and injected into the sloughing mass also. The patient took the tincture of iron, quinine, and strychnia internally; also nitro-glycerine, one-hundredth of a gain every three hours, as there existed great general prostration.

The local and general treatment enabled the system to arrest the sloughing, to establish improved vital action, throw off the sloughs and heal the very large wound.

RAPID DILATATION FOR DYSMENORRHŒA.

BY PAUL J. BARCUS, M.D., ODELL, IND.

Until we shall have discovered the true physiology of menstruation, the pathology of the disordered function will be a problem; and in all probability we shall never be able to formulate rules by which we may be guided in the selection of cases for a certain line of treatment until this problem is solved.

Many cases of dysmenorrhœa are releived by simply correcting a stenosis of the internal os with an anteflexion; while others, apparently identical pathological ly, if similarly treated are not benefited in the least. But cases being selected with proper care and skill, we are able to divide with a measure of accuracy the degree of relief we may expect for our patients.

In the prognosis of a case under observation, it has been my experience that not only must the condition of the uterus and its adjacent structures be considered, but also the duration of the malady, with the age, character and constitution of the patient.

Neither time nor space permit me to discuss the relative merits of rapid dilatation, slow dilatation, electrolysis, and the cutting operation. At the present time rapid dilatation is the most popular method and has met with a greater degree of success than either of the others and, in my opinion, when properly executed and when the after-treatment is rigidly carried out, rapid dilatation accomplishes all that is possible by either of the other methods.

Just in what way it produces its results is not determ ined, but it is not simply dilating the canal alone that cures the patient. In all probability, the beneficial results are due to more thorough drainage, which relieves the irritable condition of the endometrium and corrects the secretions, and to the effect of the presence of the stem upon the general nutrition and functions of the organ, and, possibly, to some extent, to correction of the flexion.

No one would dilate for so called ovarian or for membranous dysmenorrhœa, or for painful menstruation due to disease of the tubes, or to cellulitis, or pelvic peritonitis, or metritis.

The cases most benefited by rapid dilatation are those in which the trouble is situated in the mucous membrane lining the internal os and lower segment of the body of the uterus. There may or may not be anteflexion or discernible obstruction, but usually both are present. The cervix generally of the former designated as elongated, with pin-hole os. The nerves distributed to this membrane are in a highly irritable condition, even in cases in which there is no endometritis. All cases of long standing have endometritis, either cervical or corporeal or both, the degree depending largely upon the constitutional vigor of the patient.

In these cases the pain commences as soon as the flow begins to impinge upon the irritable terminal filaments of the endometrium. This leads to spasmodic contraction of the internal os and retention of the flow within the body of the organ, and increased pressure upon the seat of the pain. The pain does not cease until the internal os has become thoroughly relaxed, allowing free exit to the menstrual flow.

The pain is not due directly to the flexion, and the obstruction is not always the cause, but is often a consequence of the pain. The pain is due to the abnormally sensitive condition of the endometrium, which may be caused by lack of development of the organ, and faulty drainage with deranged secretions.

Upon examination during an inter-menstrual period, we will find the cervix elongated and congested as in the vaginal vault; the os eroded in old cases, and a tough, ropy mucus protruding at the external os. Upon passing a sound, when the point of the instrument strikes the constriction at the internal os, the patient complains of pain similar to that of dysmenorrhœa; and when it passes into the cavity of the body of the organ there is discovered the same tenderness immediately beyond the internal os. The obstruction at the internal os may be slight or almost perfect. The sound reveals the presence, the form and the degree of flexion, if any exist. Upon removing the instrument a drop of blood appears at the external os and the patient complains of a dull, aching pain in the region of the uterus.

Many of these cases, if of long standing, have become physical wrecks, and the slightest degree of pain or excitement is sufficient to develop a paroxysm of hysteria.

But care in the selection of cases is not the only essential to successful treatment. The operation must be carried out in detail, and attention must be equally directed to the after-treatment, both constitutional and local.

The proper time for operating is about one week after a menstrual period, which will allow sufficient time for the lacerated mucous membrane to recover before the next period.

Before commencing, all periuterine tenderness must be subdued, as it gives no promise of good results if

there is pelvic peritonitis or cellulitis, or any degree of inflammatory process in the adnexa. With these conditions present it becomes an operation fraught with great danger to the life of the patient. Endometritis or metritis without implication of the surrounding tissues, or flexions or versions do not contraindicate.

A bivalve dilator should be used, of which there are many that are excellent instruments. The patient anæsthetized, the blades should be introduced closed, up to the shoulder, and should engage the internal os sufficiently to dilate it without slipping. The blades should be slowly and carefully spread to the extent of three-quarters or one inch and allowed to remain so for several minutes, care being taken to avoid slipping of the expanded blades out of the cervix, and consequent laceration of its tissues. The dilators being then removed, a hollow, hard-rubber stem should be introduced, one of sufficient length to engage the fibers of the internal os (about two and a quarter inches), and sufficiently large to maintain dilatation to some degree, and tapering from the point, the better to insure its retention. This should be supported for 24 to 48 hours by a cotton tampon saturated with boroglyceride, by which time the fibres of the internal os will have contracted down upon the stem sufficiently to retain it in its place, without the assistance of the tampon.

If the stem causes any degree of irritation it should be removed, to be reinserted when all irritation has subsided. But it will be found that but few patients will complain of it, and many will be ignorant of its presence if not so informed.

The patient should be kept in the recumbent position for four or five days, or until the immediate effects of the operation have subsided. If there is no obstruction of the stem, and it causes no inconvenience, it may be left in position during the next sickness. Ordinarily it hould be removed before, to be reinserted again.

The use of the stem obviates the necessity for using intra-vaginal pessaries, and for repeating the dilatation; serves to correct the position of the uterus; and its presence within the canal and body of the organ seems to exert a therapeutic effect upon the mucous membrane and nerves distributed to those parts, and upon the nutrition and functions of the organ itself, that can hardly be accounted for by the better drainage and corrected position alone.

The condition of the patient is such that the constitutional treatment must be carried on at the same time, and with equal care. Most cases require a course of general tonics, and especial care as to the usual influence brought to bear upon the mind of the patient. They do better when removed from the sympathetic watchfulness of friends and relatives.

By carrying out this method of treatment, but few cases will be found that can not be relieved. And my own experience in the past convinces me that the large majority of so-called intractable cases are obstinate because of the imperfect manner in which the treatment has been executed.

I wish to express my thanks to Dr. W. G. Wylie, of New York, for the assistance he has rendered me by his article in the "American System of Gynæcology."

THE HYPODERMIC USE OF STRYCHNIA.

BY HAROLD N. MOYER, M.D., CHICAGO, ILL.

Abstract of a Paper read before the Southern Surgical and Gynæcological Association, Atlanta, Ga., November 20, 1890.

The author claimed that the irritating properties of Fowler's solution, when injected into the cellular tissue, were largely due to the presence of free arsenious acid. This objection to the hypodermic use of the drug had been obviated by employing a solution of the arseniate of sodium, a stable, neutral salt of definite composition. This salt could, he found, be injected beneath the skin without causing more irritation than would be produced by so much water. He confirmed Hammond's conclusions that arsenic was less poisonous when given by the hypodermic method, than when employed by the mouth. He had had a similar experience, in administration of the drug by the mouth, to the utmost limit of toleration, until the eyes were redened, and the stomach disturbed. Then the use of the drug by the mouth was suspended, and an increased dose given hypodermically, with complete subsidence of the poisonous symptoms. The toxic properties of arsenic are largely focused upon the stomach, liver and upper end of the small intestine. If we administer arsenic by the cellular tissue it immediately enters the general circulation and so avoids the selective action that the liver undoubtedly possesses for metallic salts. An analogous example was to be found in the use of mercuric salts, by inunction and injection.

ACUTE ASCENDING PARALYSIS, WITH THE HISTORY OF A CASE.

BY JOSEPH EICHBERG, M.D., CINCINNATI, OHIO.

Abstract of a Paper read before the Mississippi Valley Medical Assotion at Louisville, Ky., November 10, 1890.

The paper reported in detail the history of a case of this comparatively rare disease, affecting a young man previously in good health, with no venereal history. The symptoms passed rapidly from the lower extremities to the trunk and upper extremities, finally affecting vision and the sensorium, and causing death by apnœa ten days after the onset of the disease. There was fever throughout; retention of urine and constipation; the mind remained clear till a day or two before death. The paper entered fully into a comparison of this history with that of so-called Landry's paralysis, and aimed to show that no distinct clinical picture of the latter affection exists. After quoting Erb's definition of this disease, it proved that on many points presumably

essential to diagnosis, Erb is contradicted by very good authority; so that there is no pathognomonic condition in Landry's paralysis. As between this disease and acute anterior polio-myelitis, there is the greatest difficulty in diagnosis. The author held that it is totally unscientific and erroneous to make the diagnosis dependent on the presence or absence of discoverable changes at the autopsy, and an effort was made to class all cases of acute ascending paralysis under one heading; the apparent differences being capable of reconciliation by merely following out the analogy with other infectious diseases, among which it would seem this affection is to be ranked. The disproportion between intensity of symptoms observed during life and extent of pathological lesion, would be readily understood on this supposition, for such things are of common occurrence in typhoid fever. Some symptoms could be explained by the well-known nutritive relation existing between the nerve cell and its fiber, the latter being dependent for nutrition upon an unbroken connection with the ganglion cell. Finally, the author suggested that the name "acute progressive motor paralysis" be substituted for that of acute ascending paralysis, so as to conform more strictly with recorded facts; seeing that some cases begin in the upper levels of the cord and extend downward.

TRANSLATIONS.

THE TREATMENT OF TUBERCULOSIS BY VACCINATION.

TRANSLATED BY DR. F. NEUHOFF, ST. LOUIS.

Apropos of the question of the treatment of tuberculosis by vaccination, *l'Union Medicale*, of Nov. 8, 1890, has this to say:

Our readers are aware that R. Koch announced at the Congress of Berlin that he had obtained encouraging results in the treatment of tuberculosis by a method, the nature of which he refuses to divulge until his discovery has been confirmed by further experience.

Before Koch's discovery (if it is true that it will turn out successfully) is published "*urbi et orbi*" by the sound of the trumpet, it is necessary to insist on this point, namely, that on November 19, 1889, Messrs. Grancher and Martin communicated to the Academy the announcement that they had succeeded in arresting for a long time the development of experimental tuberculosis in rabbits.

Recently the same gentlemen presented to the Academy of Sciences the results of their experiments on rabbits.

The method of inoculation which was employed was that of intravenous injection, for in this manner there invariably results a tuberculosis which kills in a short and almost definite time, producing constant lesions of the liver, the spleen and the lungs, and resisting all local treatment.

I. *Treatment of Experimental Tuberculosis after Infection.*—Messrs. Grancher and Martin always proceeded after a uniform plan. Rabbits which had been treated protectively, and others which had not been so treated, were inoculated at the same time in a vein of the ear with the same quantity of virus, diluted with sterilized water. The weight of each animal was taken daily, and used as a guide in the application of the treatment.

During the past two years, the treatment was tried on 42 rabbits, of which 15 were unprotected rabbits, and 25 were protected (by previous inoculation) rabbits. The results in a general way conformed to those of the following series, in which the treatment was efficacious in all the protected rabbits.

On December 31, 1889, seven rabbits received in the vein of the ear the same quantity of a very virulent culture. The unprotected rabbits died on January 23, 23 days after inoculation; five of the protected rabbits lived 126, 176, 176, 184 and 189 days respectively. The sixth rabbit lived 229 days after the inoculation. The autopsy was almost negative; spleen small and liver healthy, with no tubercular bacilli; there were a few embryonic cells in the peri lobular portal spaces, merely traces of the tubercular process in process of healing.

II. *Vaccination Against Experimental Tuberculosis.*—Grancher and Martin endeavored to obtain cultures of graduated virulence, even to the loss of virulence, and, although the ratio was not a mathematical one, it enabled them to use the virus almost as Pasteur used the sterilized marrows in his treatment of rabies.

They designated as virulence No. 1 the most virulent inoculation fluid, which killed the rabbit in 15 days or a month, so that the numbers 1, 2, 3, etc., are of successively decreasing strength. Cultures from No. 10 to 7 inclusive are not cultivated; they are without effect on rabbits. Virulence No. 2 and 3 are fatal, but only after a variable length of time, dependent on the resistance of the animal. The length of time for 4, 5 and 6 is still more variable.

On August 27, five rabbits received in the vein of the ear, each, a half-syringeful of the very feeble culture fluid of virulence No. 6. On September 3, the same rabbits received virus No. 3. On September 12, they again received No. 3. On September 26, they received No. 5; and on October 15, they received No. 1. On the same day three unprotected rabbits were inoculated.

The latter died on October 28, November 2, and November 5, and had all the classical lesions of experimental tuberculosis. Of the vaccinated rabbits, three died at about the same times as the unvaccinated rabbits, and with the same lesions. But two rabbits resisted, one until December 17, the other till January 7, 1890. They succumbed with slight tubercular lesions.

This attempt having appeared to give a partial result in spite of the insufficient vaccination which permitted only the use of cultures No. 6, 3, 3, and 2 before the very virulent culture, the authors made a new series of inoculations. They multiplied the number of vaccinations and stopped with No. 2. Better results were ob-

tained. Some animals inoculated with culture No. 2 (which is fatal) were still living seven months after inoculation.

In their last series of experiments, Gancher and Martin vaccinated eleven rabbits successively with cultures No. 6, 5, 4, 3 and 2, from January 30, to March 25. On April 10, these eleven rabbits received at the same time with two unprotected rabbits, culture No. 1. The unprotected rabbits died between the 3rd and 10th of May. The vaccinated rabbits resisted well; two died on June 17 and 26; two on July 7 and 29; four on August 4, 7, 9. Three were still living more than four months after the most virulent inoculations.

We quote from Gancher and Martin as follows: "We believe that we have succeeded, on the one hand, in giving rabbits a prolonged resistance against very rapid and certain experimental tuberculosis, and, on the other hand, in conferring on them an immunity, the duration of which remains to be determined.

"The results on guinea pigs obtained by Koch have been similar, though obtained by methods and proceedings different from ours, since at least Koch has made no allusion to vaccination. It may, therefore, be hoped, that we will have, some day, several means of effectively combating the tubercular bacillus."

How to Keep the Paquelin Cautery in Good Order.—According to *Le Praticien*, quoted in *L'Union medicale*, Paquelin's cautery would never be found out of order if the following instructions, given by M. Colin, were followed strictly: The benzin employed should be of from 700° to 720°, using the petroleum densimeter, at a temperature of 59° F., that is to say, it should weigh from 700 to 720 grammes to the litre. At most, it should not occupy more than a third of the capacity of the reservoir. In case of need, the hand-bulb may be replaced by a pair of bellows. During the whole operation, the temperature of the benzin should be kept at from 59° to 68° F., to accomplish which it is only necessary to hold the reservoir in the hand or carry it in one's pocket. Too high a temperature hinders the incandescence of the cautery. The platinum point should be placed in the lateral portion of the flame, at the level of the center. Use pure alcohol for the lamp. Avoid heating the platinum to the luminous point. If the cautery cools off, work the bulb vigorously, and if necessary place the point in the flame again. When the operation is finished, before allowing the cautery to become extinguished, bring it to a bright red by a few rapid insufflations, and then, while it is fully incandescent, detach the rubber tube from the handle suddenly. Let the cautery cool in the open air. Cleanse it with a moistened rag. If the instrument is not used very often, it is well to heat the various points from time to time.—*N. Y. Med. Jour.*

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Koch's Secret.

Much discussion has been raised by the refusal of Prof. Koch to divulge the nature and method of preparation of his lymph. While probably most of the profession acknowledge the right and the propriety of maintaining secrecy for the present, there are many who have not been backward about expressing strong sentiments of an opposite character.

As will be remembered by those reading our first editorial on the subject, we heartily approved of the declination to make the composition of the substance public property until its merits had been proved by its originators, by those who were familiar with bacteriological technique, who were aware of the dangers of mistakes, of the necessity of the utmost precision in the preparation and employment of such agents; and we see no reason for changing from this stand. How many modifications and "improvements" would have been tacked onto the method by this time, had it been made known in the first place! And, as a result, how many hapless patients would now be in their graves.

Prof. Koch has also been the subject of criticism for prematurely announcing his discovery; and we are of opinion that there is much more ground for criticism in this instance than in the one just mentioned. For, though Virchow does say that Koch only consented to make the announcement at the Berlin Congress at the earnest solicitation of his confreres, he was of course aware of the immaturity of the problem, and of the certainty of sensationalism being wrought up by the press; of the hopes and expectations that would naturally be aroused in the countless numbers afflicted with

the fell disease—hopes awakened only to be disappointed by later developments.

By deferring the disclosure until he *was* ready to make it complete, he might have obviated these to a great extent, and also the embarrassments under which its promulgators at Berlin are now laboring, because of the flocking there of so many of the profession and so many consumptives, when preparations have been made for handling neither the one nor the other class. The *Medical News* says:

"We are informed through the cable that there are already hundreds of English doctors in Berlin who are permitted to see little and who have opportunity to learn less. They all agree in complaining bitterly of the scant courtesy which is shown them, and it is asserted by those who ought to know that the same treatment will be shown to the American doctors when they arrive.

"Professor Koch has always been notorious for the seclusion which he insists upon, and to see him now is absolutely impossible. He has also practically limited the employment of his liquid to von Bergmann, Cornet, and Levy, all of whom in one way or another have placed the discoverer under personal obligations by favors done him in the past. So complete a monopoly have these men of the employment of the liquid that they have established numerous private hospitals in Berlin, in which they charge exorbitant prices, both for living expenses and medical attendance. Thus it is said that Levy charges every patient $25 for each visit, and that even with this extortionate price he treats nearly two hundred patients daily. The other physicians, it seems, are not far behind Levy in their charges, and physicians, students, and patients are endeavoring by every means in their power to obtain information which cannot be had. The number of consumptives who have flocked to Berlin from all parts of the Continent reaches several thousand, and it is supposed that at least 1700 of these have already been treated—none of them, of course, as yet with marked improvement in their condition. The fact that so many consumptives have applied for relief is said to be a source of much distress to Dr. Koch, who realizes better than anyone else apparently that his remedy is not a cure-all."

Hypnotism as a Curative Agent.

Though the interest in hypnotism does not seem to have flagged abroad, the subject does not appear to be receiving in this country the same degree of attention which was paid to it some months ago, after the numerous contributions by foreign writers which appeared about that time. The views of Norman Kerr, the well-known English specialist, on hypnotism, considered in the light of a therapeutic agent, as expressed at the meeting of the British Medical Association at Birmingham, may be of some interest. Kerr regards hypnotism as a disturbance of the brain, an abnormal psychical condition with increased receptivity and energy. Before we can decide whether hypnotism is a justifiable and desirable therapeutic agent, we must weigh well the following considerations:

1. Only a limited number of persons are accessible to its influence.

2. The after effects consist in a disturbance of the mental equilibrium, a dissipation of energy and nervous exhaustion. Frequent repetitions may cause a lowered activity of the cerebral and nerve functions and intellectual decay.

3. The hypnotic state is a real neurosis, combining in itself the lethargic, cataleptic and somnambulistic states.

4. If, therefore, a disease is cured by hypnotism, it is simply by the substitution of another disease.

5. If sometimes a disturbance is temporarily relieved by hypnotism, the primary disease is not also necessarily cured. By means of hypnotic anæsthesia, the harmful effects of the original disease are promoted, although pains which may be present are conquered for the time. The best results of hypnotism are said to be found in nervous diseases, but Kerr asserts that hypnotism simply makes the disease worse. He has never seen hypnotism lead to permanent recovery in dipsomania and narcomania.

6. The dangers of hypnotism are very considerable. Every seance brings the subject more under the influence of the hypnotiseur, and the sittings often end in the complete subjugation of the former to the will of the latter.

7. Hypnotism often brings about a subtile electrical (?) affinity between operator and subject which can only lead to harm.

8. Operators have brought about the commission of crimes, by means of hypnotism, so that in France and Belgium the governments found it necessary to forbid the practice of hypnotism.

9. The statement that no one can be hypnotized against his will is only partially correct, for a strong, persistent will is able to overcome that of a weaker individual.

In view of all these possible dangers Kerr cannot understand how physicians can allow themselves to to be lead into the use of hypnotism in family practice. He earnestly opposes hypnotism—medical, philanthropic, as well as for the purposes of exhibition—more especially the first, as unworthy and degrading, and hopes that England will also raise legal barriers against the practice. In countries where it is still unrestricted, it should be conducted only in the presence of another physician and an adult layman, and a statement of the results of each seance and the after-history should be made. Kerr closes with saying that the proper thing for physicians to do would be to refrain from the use of this hazardous remedy, which is never free from danger and the possibility of disastrous after-effects, which leads to the gravest abuses, finds an indication in but few diseases, lowers mental activity, and entails upon posterity permanent and morbid nervous burdens.

A Hundred Cases of Operation for Stone.

The foundation for this report is the sixth hundred of the operations for stone in the bladder performed by Prof. Dittel (*Wien. klin. Wochensch.—Med. Chir. Rundschau*). Of the 100 cases reported, 70 were operated upon by litholapaxy, 22 by sectio alta, and 8 by sectio mediana. Of the first group, four died, one from fatty heart, and another from pre existing renal complications, leaving a mortality due to the operation itself of not quite 3%. Among the complications found, hypertrophy of the prostate occurred frequently; of this there were 14 cases of moderate enlargement, 16 large, and 22 very large hypertrophies (mostly of complete hypertrophy, *i.e.*, including the middle lobe). In two cases death was directly attributable to the litholapaxy, inasmuch as lacerations were caused by the operation, which led to septic infection. These two cases confirm the previous experience of the author, that lacerations of the bladder are of but little moment, but that the dangers of the operation lie chiefly in urethral lacerations, which are especially difficult of avoidance where the prostate is enlarged. As regards a return of the stone, we must distinguish between a fresh formation of stone and the returns which result from leaving a fragment of stone in the bladder. It is not a sure indication that no debris is left in the bladder when aspiration only brings a clear fluid through the evacuation tube. To be absolutely certain, it is best to examine with the cystoscope. In the tables appended to the article nine recurrences are noted, five following litholapaxy. If returns are more frequent after litholapaxy than after cutting operations, the former has on the other hand the great advantage that patients who have not suffered any chance tears of mucous membrane are, as a rule, able to resume their occupations after a stay of from six to fourteen days in the hospital. Median sections were eight in number, two of which were urethro-vaginal incisions which were successfully sutured afterward, and one urethral incision in a male on account of the stone's having become wedged in the urethra. In the remaining five cases the low operation was chosen because of a purulent cystitis, and once because the nucleus of the stone was a fragment of a Nelaton's catheter, and was therefore not adapted to litholapaxy. Supra-pubic cystotomy was performed 23 times with 6 deaths, which were not, however, due to the operation. Attempts were made to shorten the cure in four cases by suturing the bladder wound, but the results did not afford much encouragement; on the other hand the open after-treatment, with drainage of the bladder, afforded no instances of infiltration of urine or retention of pus, for which reasons the author is not enthusiastically in favor of suturing the bladder-walls after incision. In old patients with paresis of the bladder the author left permanent fistulas leading into the bladder, in which the catheter for drainage was left in the fistula. Drainage of the bladder after the supra-pubic operation never gave any instances of catarrhal infection of the bladder; indeed, the catarrh rapidly diminishes, and comes back as soon as it is sought to replace supra-pubic drainage by drainage through the permanent urethral catheter.

The Radical Cure of Hydrocele.

Dr. Oscar H. Allis, in a recent number of the *Medical News*, discusses the frequently disastrous results which follow attempts at the radical cure of hydrocele, and expresses a decided preference for the "open" method of treatment. He gives a condensed list of cases in which the operation resulted unfavorably, reported by a number of surgeons, from which we find that 12 surgeons report 13 deaths, 13 report 17 cases of sloughing of the scrotum, 5 surgeons report 6 cases of pyæmia, and 4 report 4 hæmatoceles. Abscesses were very frequent. There were but 3 deaths following incision into the sac.

In endeavoring to explain the unfavorable results, he first notes the fact that the scrotal tissues are tense and tough, and next, that the canula used for withdrawing the fluid is a blunt instrument which, when withdrawn, leaves an opening through which fluids may pass in either direction; fluids may flow from the sac-walls into the sac-cavity, and on the other hand, fluids injected into the sac-cavity may pass into the sac-walls. The sloughing which followed injection and the seton must be explained by excessive inflammation, the blood-supply being choked off.

The cases of pyæmia are to be explained by the fact that in old abscesses with hypertrophied walls which fail to collapse, the fluid does not all flow out readily, but must be expelled by pressure. This empties the sac of fluid, but air is necessarily admitted to fill the vacum so produced, the sac-walls being incapable of collapsing. When such a sac is injected, inflammation is set up to a violent degree and new products are thrown out; heat, moisture, air, and decomposing blood, in a closed sac combine to cause putrid absorption and septicæmia. As to three deaths resulting from incision, it is probable that the method was carried out in a faulty manner. The incision as usually practiced is often insufficient in length, leaving a cupped sac for the retention of secretions. To follow out the open method properly the whole interior of the sac must come under scrutiny; unhealthy granulations, laminated febrin, and all diseased tissue must be removed and ample drainage must be provided for. By the open method we can arrive at a satisfactory diagnosis and institute the proper curative measures if the case be more than simple hydrocele, which cannot be held in advance. We can see and feel all parts of the sac, and with ordinary skill and completeness there will be no unpleasant sequelæ and no tardy recoveries.

He closes by saying that the results cannot be attributed to faulty, pre-antiseptic methods, for all employed the same methods; nor so unskillful operators, for

among the most unfortunate are some of the highest names of American surgeons. He is also convinced that the list of disasters is not as large as it might be, from the fact that many surgeons readily forget their bad results, and not because they would wilfully make misstatements.

Phosphorus in Sciatica.

Sciatica is a disease which often proves rebellious to treatment, consequently the list of remedies mentioned for it is a very long one. Dr. A. K. Bell, in the *Medical and Surgical Reporter*, reports three severe cases in which marked relief followed the use of phosphorus, and recommends the further trial of this drug. Three cases are not enough to lead to any definite conclusions, but with satisfactory results they are certainly sufficient to warrant a more extended use of the remedy in this frequently intractable disease.

One case was that of a man, æt. 40 years, who had suffered for two months before being put on phosphorus, and had been in the hands of several physicians. The elixir of phosphorus was then given, and the patient was dismissed cured in one week. A year afterward he had another attack which yielded promptly to phosphorus. Another case was that of a woman, æt. 42 years, who had had the disease for three months, and the only relief she gained was but temporary, from the use of morphia. Here the use of elixir of phosphorus was attended with equally satisfactory results. The third case was that of a mulatto woman, æt. 43 years, had been suffering for about a year, the pain being at times worse than at others. She was extremely anæmic and emaciated, and was first given tartrate of iron and potash for a week; her general condition being much improved, she was then given phosphorus, and in two weeks she was up and walking about. Dr. Bell firmly believes in the remedy, and as above said, his results entitle the drug to further experimentation.

Toxic Effect of Calomel in the Presence of Chlorides of the Alkalies.—Dr. Paul Adam (*Nouveaux Remedes*, August 24, 1890) confirms the statements of such authorities as Moll, Herve, Guibourt, Larocque, Jolly, and others to the effect that within the body calomel does not to any appreciable extent go into solution as sublimate. M. Mialke's assertion that it does, and that the agent in effecting this is sodium chloride, is still current doctrine. Dr. Adam's experiments were made both in the absence and presence of organic matter; in either case only traces of mercury went into solution provided that there was not free access of air. In the presence of air a considerable quantity of mercury was dissolved. The author claims that within the body the access of air is practically *nil*. Besides experiments outside the body, others were made on the living animal which confirmed the above negative statement.

MEDICAL ITEMS.

University of Pennsylvania.—The compulsory course for the medical degree in this University has been lengthened to four years.

A Chemist Punished for Adulterating.—A pharmaceutical chemist of Woronesh, in Russia, has been condemned to six months' imprisonment for selling adulterated quinine.

Another Rival of Koch.—It is said that Prof. Schrotter, of Vienna, is announced as a rival of Koch in the discovery of a cure-all for pulmonary consumption. Prof. Schrotter's remedy is said to be prussic acid.

An Epidemic of Typhoid Fever is raging in Clementville, Ohio. There have been 89 cases, 24 of which have proven fatal. At present 40 persons are suffering. Business has been suspended. The place has a population of 200.

Uncertified Deaths in Great Britain.—The assertion was recently made on the floor of the British House of Commons that 15,000 persons die and are buried in Great Britain, each year, without death-certificate having been given as required by law.

Bell-Ringing in Philadelphia.—The Trustees of a church in Philadelphia recently ordered the discontinuance of ringing the bell out of consideration for sick and nervous people in the neighborhood. This calls to mind the unsuccessful attempt to suppress the Pilgrim chimes in this city, which was made some years ago.

Exploratory Laparotomy Under Cocaine has recently been successfully performed by Dr. MacLaren, at the Cumberland Infirmary, England.—*Med. Rec.*

This is by no means novel; Dr. H. C. Dalton, of the St. Louis City Hospital, performed a laparotomy under cocaine some two years ago, with complete success.

Vaccine Virus from Goats.—Hervieux strongly advocates the substitution of the goat for the calf as a source from which to obtain vaccine virus, says the *Times and Register*. The reasons are: The danger of inoculating with the virus of tuberculosis, to which the bovine race is very prone, and the fact that the goat is not liable to tuberculosis.

To Relieve Facial and Cranial Pains a very simple procedure is recommended by Dr. Naegele, in the *Correspondenzblatt f. Schweizer Aerzte*, the theoretical explanation of which must be left to anatomists and physiologists. It consists simply in raising the hyoid bone, as in beginning the act of swallowing, and fixing it thus for from 60 to 70 seconds, by which means many forms of headache and toothache, as well as nausea, are for the most part instantly and permanently cured.

A New Poison in Cheese.—Dr. Victor C. Vaughan has detected a new poisonous element in cheese, differing from tyrotoxicon, but has so far been unable to isolate it. Taken in sufficient quantities it produces vomiting and purging, and in animals, death. It has been decided that it is not a globulin or a peptone, but belongs to the class of so-called poisonous albumins.

A Substitute for Capsules has been brought forward by a German physician in the shape of tissue paper, in which ill-tasting powders are to be enveloped. He describes the paper minutely, and gives in detail laboratory experiments showing that the paper does not hinder absorption. The wrinkle is almost "as old as the hills," at least it is on this side of the Atlantic.

Puncture and Collodion in Hydrocele.—For the treatment of hydrocele Leroy recommends that one-third or one-fourth of the fluid be withdrawn by means of an aspirator, after which the whole scrotum is painted with a thick layer of collodion, which is to be renewed every 24 hours. A cure results in from 12 to 15 days. M. Broquet also has employed this treatment with success in three cases.

Influenza in Dogs.—MM. Megnin and Veillon recently presented a note to the Societe de Biologie, stating that of late a disease similar to influenza has raged in certain kennels. In a pack of 120, at Chantilly, the majority were attacked, and among coursing dogs, at Aveyron, and a fine pack of beagles, the disease was also prevalent. All the characteristics of human influenza were found in these dogs.

Rupture of the Rectum by Petersen's Colpeurynter.—Dr. G. Ryerson Fowler (*Annals of Surgery*, August, 1890, p. 129) records a case of rupture of the rectum by Petersen's colpeurynter, during an attempt to perform intra peritoneal cystotomy. He attributes the accident to degenerative changes in the rectal wall. Only eight ounces of fluid were used with the bag. One or two other cases of the kind are referred to, and the conditions under which the use of the bag is contraindicated are alluded to.

A Strange Experiment is in progress at the Charity Hospital, on Blackwell's Island. Dr. Phelps, of the University Medical College, assisted by other physicians, is trying to graft upon the deformed leg of Johnny Gethins, æt. 14 years, the leg of a spaniel dog. Boy and dog are bound together, and the dog is incased in a plaster cast, so he cannot move. The surgeons think they can make the strange graft unite and give young Gethins a sound leg, so that he can throw away his crutches, or rather, transfer them to his dog.—*Times and Reg.*

Prohibition of Hypnotism in Russia.—In a circular issued by the Russian Medical Department it is declared that, for a number of reasons, given in detail, the medical council has resolved: That henceforward any public seances of hypnotism and magnetism are strictly prohibited; and that the application of hypnotism for medical purposes can be permitted solely to medical practitioners, under the condition that the operation is to be practiced invariably in the presence of other medical men.

The Treatment of Burns.—Dr. Bardeleben, of Berlin (*Lyon Med.*), treats burns by washing with a 2% solution of carbolic acid or a 3-1000 solution of salicylic acid. The blisters are then opened, and the whole surface covered with bismuth subnitrate, over which cotton wool is placed in a thin layer. This dressing is removed when necessary; if the burns are very extensive bismuth in ointment is used instead of the powder. It is said that symptoms of bismuth intoxication never follow, and that recovery is more rapid, and suffering less than with any other method of treatment.

Medical Journalism.—Some idea of the vastness of medical periodical literature at the present day may be formed from the fact that on September 2, the Trustees of the Newberry Library at Chicago ordered 285 journals dealing solely with the healing art in its various branches to be regularly supplied to the institution. Of these 95 are published in the United States, 59 in Germany, 47 in France, 20 in Great Britain, 15 in Austria, 13 in Italy, 7 in Belgium, 5 in Canada, 4 in Spain, 3 in Norway, 3 in Sweden, 3 in Denmark, 2 in Switzerland, 2 in Australia, 1 in India, 1 in Mexico, 1 in New Zealand, 1 in China, 1 in Japan, and 1 in Africa.

Ligature of the Vertebral Artery in Epilepsy.—Dr. Telford Smith (*Journal of Mental Science*) relates the following case: An imbecile boy, æt. 11 years, had from twenty to thirty epileptic fits a month. The imbecility and epilepsy were both congenital. The left vertebral artery was tied in 1881. Four years after the ligature there was marked mental improvement after careful training, and there were no epileptic fits. They graduully returned, however, and the mental condition relapsed. In 1885 he had 49 fits; in 1888, 231 fits; in 1889, 245 fits; and the mental state was at the time of the report slowly deteriorating.—*Brit. Med. Jour.*

Management of Gonorrhœa.—Lang (*Wiener med. Wochenschrift*, October 2, 1890), discusses some of the causes of the prolongation and complications of gonorrhœa. One of the most impartant points in the treatment of gonorrhœa is, he thinks, the proper regulation of eating and drinking. In some cases attention to these is all the treatment that is necessary. The injection chiefly used by the author is a solution of sulphocarbolate of zinc of a strength of from ¼ to 1%. Stronger solutions may be employed if a mucilaginous menstruum is used instead of water. It is important to pay attention to the size of the syringe. Patients, if not otherwise instructed, will often use a large syringe,

and by injecting too much fluid injure the urethra. Lang uses syringes of 3 sizes holding respectively, 1½, 2, and 3 drachms, and to each case orders the size which seems most suitable.—*Br. Med. Jour.*

A Needle in the Peritoneal Cavity.—In the Berlin Medical Society Dr. Hermes reported the following interesting case: A young girl, æt. 17 years, swallowed a sewing needle in September, 1889. Following this were intense pains in the region of the stomach which were heightened by standing and going about. After six months the patient presented herself to Prof. Sonenburg, who made out a hard, resisting body midway between the umbilicus and ensiform cartilage, which was the seat of extreme pain. On opening the abdominal wall the operator found at its posterior portion a bulging forward like that of a hernia. The peritoneum was incised here and omentum presented itself in which the needle could be plainly felt, having in all probability forced its way through the stomach. The patient was discharged well.

The Dry Treatment of Chancroids.—It is generally conceded that if chancroidal ulcers can be kept perfectly dry a great step has been taken towards their rapid healing. With this view, the following procedure has been used to some extent in the surgical divisions at Bellevue Hospital, New York: A small roll of absorbent cotton about ½ inch in diameter and long enough to surround the penis just behind the corona, is put in that position after the prepuce has been well retracted. A rubber thread band is slipped over this ring of cotton in order to hold it in its place. By this means the sulcus behind the glans is obliterated, which is especially liable to retain the secretions, and the prepuce is held back from contact with the ulcerated surface. The cotton absorbs the exudation from those surfaces almost as soon as formed. The dressing is light, is easily handled, and may be renewed as often as needed to keep the parts in a dry condition. In addition to chancroids, herpes preputialis and venereal warts have been found to heal rapidly under the use of this dressing; sometimes no other treatment has been found necessary for these local lesions.—*J. A. M. A.*

Lupus Vulgaris and Tuberculosis.—Lupus vulgaris, of which we are now hearing so much, is an extremely chronic disease of the skin, attacking persons between the ages of two and fifteen. It is characterized, says Green, by the appearance of reddish-brown nodules of granulation-tissue upon the skin, usually of the face. The mucous membranes are rarely affected. The nodules start in the corium, but penetrate the connective tissue beneath and the papillary layer above. The different stages and clinical aspects of the disease as it progresses are known as lupus maculatus, lupus exfoliativus, lupus exulcerans, lupus serpiginosis, and lupus hypertrophicus.

The disease spreads by the formation of fresh nodules at the periphery of the original lesion. New centers form and the old ones may gradually disappear. If the tissue breaks down an open sore is found, covered with yellowish and brownish crusts.

The nodules consist of granulation-tissue, containing epithelioid and a few giant cells. Unlike ordinary tubercle, the lupus nodules are rather vascular. Tubercle bacilli are found in the tissue, but they are very infrequent, and often many examinations are required to detect them. Inoculation of lupus nodules will, it is asserted, cause tuberculosis in rabbits and guinea-pigs; but inoculation of the skin with tubercle will not produe lupus.

For this and other reasons so distinguished an authority as Kaposi denies that lupus is a cutaneous tuberculosis, although that view is held positively by Koch and his pupils.

Lupus, chronic as it is in its tendencies, often disappears for a time under treatment, only to reappear later. Dermatologists generally give a favorable prognosis, provided treatment is persisted in.—*Medical Record.*

SOCIETY PROCEEDINGS.

SOUTHERN SURGICAL AND GYNÆCOLOGICAL ASSOCIATION.

Third Annual Meeting, held in Atlanta, Georgia, November 11, 12 and 13, 1890.

First Day—Morning Session.

The Association convened in Concordia Hall, and was called to order by the President, Dr. George J. Engelmann, of St. Louis, Mo., at 9:30 a.m.

Mayor Glenn delivered an

Address of Welcome,

the response to which was made by Dr. R. B. Maury, of Memphis, Tenn.

Dr. R. B. Maury, of Memphis, then contributed a paper, (see page 427), entitled:

How Shall We Treat Our Cases of Pelvic nflammation.

Afternoon Session.

Dr. W. H. H. Cobb, of Goldsboro, N. C., read a paper on

Supra-Pubic Cystotomy in a Case of Enlarged Prostate.

The patient, a farmer, married, æt. 49 years, rheumatic diathesis, dated his troubles back to 1881; while attending to the duties of Register of Deeds, he carelessly allowed overdistention of his bladder, and had suffered more or less since that time. In 1882 he had an attack of nephritic colic and passed a small calculus, similar in size and shape to a grain of wheat. On three different occasions he passed dark, gritty deposits. In 1888 he suffered much inconvenience and some pains in urinat-

ing. In 1887 he passed a dark, gristly, bloody substance about the size of a corn pea, accompanied by much pain and bloody urine. For the past three years he has suffered much with cystitis in a very aggravated form, with great pain and difficulty in defecation, urine containing much blood, pus and mucus. The patient's efforts to relieve his bladder and bowels were tormenting, and night after night was spent walking over his premises with groanings so severe as to disturb his neighbors. The patient consulted Dr. Cobb, June 15, last, and from the history of the case he suspected vesical calculus, but failed upon examination with sound to detect any stone. A digital examination, however, per rectum, disclosed the right lobe of prostate greatly enlarged, rough, indurated, exceedingly tender and sensitive. After consulation by letter with Hunter McGuire, he decided upon supra-pubic cystotomy as the only hope of permanent relief, which was done after the method of Dr. McGuire June 23. At the expiration of two months (August 23), he found the prostate perfectly normal with no symptoms of cystitis and withdrew the plug, allowing the fistula to unite, which it did in about ten days. His patient performs the act of urination and defecation without the slightest trouble, and expressed himself as entirely relieved, and is at present following his usual vocation.

Inflammation in and About the Head of the Colon.

Dr. L. S. McMurtry, of Louisville, read a paper on this subject. He said the teachings to be found in systematic treatises on surgery and practical medicine upon inflammation and its results in and about the caput coli are not only worthless, but positively misleading. This is true not only as to pathology and treatment, but even as to the anatomy and relations of the cæcum and its appendix.

It is well known that inflammatory changes in the vermiform appendix are in almost every cases the origin and seat of the inflammatory diseases about the caput coli. Inflammation of the cæcum is very rare, yet the testimony of surgeons and pathologists is abundant that in a certain proportion of cases cæcitis, with perforation, occurs without involvement of the appendix. Regnier in 1886 operated in a case presenting symptoms of intestinal obstruction with peritonitis, doing an abdominal section. At the autopsy cæcitis with perforation was discovered. In 1888, the speaker operated in case of perforative cæcitis and sutured two perforations in the cæcum. His patient recovered and was present in the surgical section of the American Medical Association in May of that year.

Fæcal impaction has been mentioned by surgical writers as a cause of inflammation about the head of the colon. Pain over the cæcum, with a fæcal mass perceptible on pressure often occurs, but rarely, if ever, associated with peritonitis. A few weeks since, Dr. McMurtry saw a case in conjunction with Dr. H. H. Grant, of Louisville, in which a localized peritonitis existed, in the right iliac fossa, with a well defined firm tumor. Abdominal section was done, and instead of appendicitis, they found the disease to be cancer of the caput coli. Irrigation and drainage rescued the patient from the immediate danger begotten by active peritonitis. The patient was a woman of middle age, and the engrafted peritonitis presented the symptoms of an acute condition. Malignant disease of the cæcum has not, so far as the writer is aware, been mentioned by writers upon this subject as a probable condition in the diagnosis of deep-seated inflammations of the right iliac fossa.

The decision to operate should be determined more by the grade of the inflammation than by the time it has existed. When a diagnosis has been made, and three days have elapsed without subsidence of pulse and temperature, operation should be done.

Dr. McMurtry submitted the following conclusions:

1. Inflammation about the caput coli is, as a rule, inflammation of the appendix.

2. A certain proportion of cases will recover spontaneously by resolution. With these recurrence of the disease is common.

3. In the larger proportion the disease will endanger life, and may at any moment assume a condition practically hopeless.

4. Early operative interference involves less danger than delay, and should be resorted to in all cases in which a high grade of inflammation is persistent.

5. The essentials of the operative technique are brief anæsthesia, quick and thorough work, removal of the appendix, irrigation and drainage. The lateral incision is preferable to the median.

Evening Session.

President Engelmann delivered an address entitled

The Causes of Ill Health in American Girls, and the Importance of Female Hygiene.

He showed that the health of the American girl is threatened and impaired by causes more or less avoidable, as they are due to our methods of life, our methods of training and education; that the physique of this girl, most favorably situated amid auspicious possibilities, is imperfect; her brain overworked, her nerve power exhausted, her function impaired, and reproduction endangered, all by reason of the susceptibility of her peculiar organization, and the increased impressionability of the sensitive system during the years of development, in which it is subjected to the most severe strain.

The remedy is attention to woman's peculiar organization and the cyclical waves of her dominant function; or, in other words, harmonious development and occupation of nerve and muscle; diminished brain work and nerve stimulation with increased and co-ordinate physical exercise; increased protection and diminished compression of dress; self-knowledge and individual care during periods of heightened susceptibility. Changes are necessary in custom and fashion, in methods of labor

and education. A harmonious co-education of mind and body should be approximated, with coincident maintenance of proper hygienic conditions.

Dr. Engelmann closed with a plea for the self-care of the American girl and her proper physiological instruction by the mother, which, alone, will mitigate or remove the initial cause of many of her ailments. Upon the mother he would impress that the perfect development of the female function, and the maintenance of this function, once developed, in a healthy condition, is essential to the perfect development of the girl and the perfect health or the woman; that self-care, a well-regulated female hygiene, is the foundation of her well-being.

SECOND DAY—MORNING SESSION.

DR. C. A. L. REED, of Cincinnati, Ohio, read a paper entitled

INDICATIONS FOR OPERATION IN ECTOPIC GESTATION.

The paper starts out with the assumption that the only proper treatment of ectopic gestation is by laparotomy, or, more properly, coeliotomy. While the profession has become practically unanimous that this is the proper line of treatment, the indications for operation have been less definitely decided upon. This conviction is forced upon the observer, not only by a study of the literature of the subject, but by encountering cases which have been advised against operation by their attending physicians, until hæmorrhage within the pelvis has threatened a fatality, which is but too frequently realized. The most legitimate excuse for this dilatory practice, is to be found in the confusion which has arisen with regard to the supposed uniform causal relationship of ruptured ectopic gestation to pelvic hæmatocele, and the division of the latter into "primary" and "secondary" rupture. These terms are unfortunate, and, as used in this connection, may be entirely arbitrary. Primary rupture is made to mean rupture beneath the peritoneum, instead of first rupture as the etymology of the word would imply, while secondary rupture is made to mean rupture within the peritoneum, instead of "second" rupture. Whereas, an intra-peritoneal rupture may be, and frequently is a primary rupture, when spoken of with reference to the sequence of events in ectopic gestation. There would be no serious confusion even here if we were not also taught to leave extra peritoneal hæmatoceles alone to be taken care of by absorption, and if we did not add that, as these hæmatoceles are generally caused by ruptured ectopic gestation sacs, we are to relegate these cases also to the expectant plan of treatment. This conclusion is without warrant, and is responsible for hundreds of deaths annually from this one cause.

The treatment of ectopic gestation promises the diagnosis of the condition. This is obviously difficult, and in the majority of instances cannot be arrived at at all, or, if at all, only presumptively; but in all these cases conditions can be found in the pelvis, which if not conclusively of extra-uterine pregnancy, yet constitute conclusive indications for exploratory operation. The presumption of ectopic pregnancy can be arrived at before rupture, chiefly by a history of previous sterility, by a previous amenorrhœa, followed after a few weeks by irregular hæmorrhage, by increased tumefaction to either side or back of the uterus, and by the existence of false decidua within the uterus. The latter fact may be safely determined by the judicious use of the Emmet curette forceps. The diagnosis after rupture is essentially the diagnosis of internal hæmorrhage. Time wasted either to determine the the cause of that hæmorrhage, or to find if it be primary or secondary, is criminal. The thing to do is to cut down and operate. The position has been taken that time should be taken for the patient to rally from the shock. One of Dr. Reed's own cases died simply because he waited twelve hours for reaction—a lesson which taught him the fallacy of the old teaching, and which has since saved lives at his hands. The best way to overcome shock from internal hæmorrhage is to stimulate the patient by giving ether, stop the drain by ligating the bleeding vessels and rouse the nervous system by washing out the belly with hot water.

Dr. Reed's conclusions are:

1. The only proper treatment of ectopic gestation is that by abdominal section.

2. The operation should be done in cases before rupture as soon as the condition can be presumptively diagnosed.

3. The operation should be done in cases after rupture so soon as the evidence of internal hæmorrhage become apparent.

4. In cases in which the period of viability has already been reached without rupture, pregnancy should be allowed to advance to term before operation, but only under the closest possible vigilance.

5. In all cases the appendages from both sides should be removed providing the condition of the patient will justify of the extension of the operation.

DR. BEDFORD BROWN, of Alexandria, Va., followed with a paper (see page 443) entitled

THE LOCAL AND GENERAL TREATMENT OF GANGRENOUS WOUNDS AND DISEASES.

DR. HENRY F. CAMPBELL, of Augusta, Ga., presented a paper on

VESICO-VAGINAL FISTULA.

DR. W. L. ROBINSON, of Danville, Va., read a paper on

THE TREATMENT OF GENERAL SEPTIC PERITONITIS,

in which he called attention to those cases which tended, by absence of pain and a seemingly improved condition after chill and fever, to mislead as to the necessity of operating, and instanced two cases of recent date seen in consultation in which septic peritonitis and secondary abscess existed in spite of the seemingly favorable condition of the patient. He says that often there is an utter disproportion between the pathological

condition and the amount of pain and tenderness—a condition so often seen in puerperal peritonitis.

He states that traumatic abdominal injuries, appendicitis and pelvic inflammations, are the chief causes of septic peritonitis, while of course any internal or external influence which produces suppuration may be the indirect cause.

He agrees with Dr. G. Frank Lydston, of Chicago, that in children falls, blows, etc., are the causes generally of peritonitis, and that because of the age of children in directing attention to the seat of injury we often diagnose the disease too late. Dr. Robinson takes the stand that gonorrhœa is a frequent cause of septic peritonitis and the reason why it did not always produce it was, that it did not invariably invade the uterus, and even when it entered the tubes, the adhesions to the ovary rendered it self-limiting.

He holds that section, irrigation and drainage is the treatment, and that where adhesions are extensive that salines should follow the operation in order that the peristaltic action of the bowel should prevent reformation Cases occur which, when seen by the surgeon, are too prostrated to undergo a complete operation and the proper plan is to rapidly do what one can by section, irrigation and drainage. Dr. Robinson instanced a case of recent date in which the patient was saved when seen only *in extremis*. He urges the surgeon to go prepared to resect, anastomose, etc., as complications may indicate. Where conditions are diagnosed with which will most likely terminate in septic peritonitis, such as recurring appendicitis, that preventive measures should be undertaken; and where great tympanites exists he would adopt Dr. Davis' mode of opening the bowel and flushing it out with hot water.

Dr. John D. S. Davis, of Birmingham, Ala., contributed a paper entitled

The Clinical History of the Episcystic Surgical Fistula, With Cases.

[to be concluded.]

SOCIETY NEWS.

AMERICAN PUBLIC HEALTH ASSOCIATION.

The American Public Health Association will convene at Charleston, S. C., Tuesday, December 16, 1890, at 10 o'clock a. m., and continue four days. The meetings will be held at Hibernian Hall.

Subjects for Consideration.

1. Sanitary Construction in House Architecture.
   a. Heating.
   b. Lighting.
   c. Drainage.
   d. Ventilation.
2. Sewage Disposal.
3. Maritime Sanitation at Ports of Arrival.
4. The Prevention and Restriction of Tuberculosis.
5. Isolation Hospitals for Infectious and Contagious Diseases.
6. Establishments in Favorable Climates for Persons having Tuberculous Predispositions.
   a. Schools for Children and Adolescents.
   b. Sanatoria.
   c. Permanent Residences.
7. Papers on Miscellaneous Sanitary and Hygienic Subjects.

Papers upon miscellaneous sanitary subjects not included in the above list will be received by the Executive Committee, subject to the requirements of the By-laws. Preference will be given, however, to papers upon the subjects selected by the Committee in making up the daily programme of the meeting.

Reduced rates are given by the railroads.

THE AUSTIN DISTRICT MEDICAL SOCIETY.

This Association will hold its thirteenth quarterly meeting at Austin, Texas, Tuesday, December 18, 1890.

Programme.

morning session.

1. Reading of Minutes.
2. Application for Membership.
3. President's Address.
4. "Apocynum Cannabinum," by Dr. W. T. Richmond; discussion opened by Dr. J. H. McCaleb and Dr. T. O. Maxwell.
5. "Traumatic Injuries of the Head," by Dr. A. N. Denton; discussion opened by Dr. T. D. Wooten and Dr. G. W. Christian.
6. "How to Prevent After-Pains," by Dr. T. J. Bennett; discussion opened by Dr. A. Garwood and Dr. H. H. Thorpe.

afternoon session.

7. Can Pneumonia be Aborted?" by Dr. J. C. Carpenter; discussion opened by Dr. J. W. McLaughlin and Dr. W. A. Morris.
8. Election of Officers.
9. "The Influence of Grave-Yards on the Public Health," by Dr. J. W. Cahart; discussion opened by Dr. R. P. Talley and Dr. F. E. Daniel.
10. Verbal Reports of Cases.
11. Unfinished Business.
12. New Business.
13. Banquet at Night.

The President's Address, and election of officers were properly postponed from the last meeting to the present on account of the latter being the time for holding the annual banquet. A real enjoyable time is anticipated. It is safe to predict a full attendance. We have a good programme. The social feature will predominate toward the close. Every regular physician accessible to Austin is invited to be present and take part in the proceedings. F. R. Martin, President.

T. J. Bennett, Secretary.

SELECTIONS.

TUBERCULOSIS.

Dr. Robert Koch, *Brit. Med Jour.*, (International Med. Congress). Very soon after the discovery of the tubercle bacillus, I set about seeking for substances which could be used therapeutically against tuberculosis, and I have pursued this search, which has, of course, been often interrupted by my other occupations, perseveringly up to the present. In the belief that there must be a remedy for tuberculosis, I do not by any means stand alone. Billroth has, in one of his last writings, expressed himself with all possible distinctness to the same effect, and it is well known that the same object is aimed at by many investigators. It seems to me, however, that the latter have not as a rule followed the right way in their investigations, inasmuch as they have begun their experiments on man. To that I ascribe the fact that everything which people have believed themselves to have discovered in that way—from benzoate of soda down to the hot-air treatment—has proved to be a delusion. Experiments must in the first place be made not on man, but on the parasites themselves in their pure cultures; even if substances have been found which have the power to check the development of tubercle bacilli in the cultures, man should not forthwith be chosen as the subject of experiment. But the question whether observations which have been made in a test tube hold good also in living animal bodies should first be settled in animals. Only if the experiments on animals have proved successful should the method be tried on man. Proceeding according to these rules I have in the course of time tested a very large number of substances to see what influence they would exert on the tubercle bacilli cultivated in pure cultures, with the result that not a few substances have the power, even in very small doses, of hindering the growth of tubercle bacilli. More than this, of course, a remedy cannot do. It is not necessary, as has often been erroneously assumed, that the bacteria should be killed in the body; in order to make them harmless to the body it is sufficient to prevent their growth, their multiplication. I have proved the following substances to be remedies which hinder such growth even in very small doses (to mention only the most important)—A number of ethereal oils; among the aromatic compounds, β naphthylamin, paratoluidin, xylidin; some of the so-called tar-dyes, namely, fuchsin, gentian violet, methyl blue, chinolin yellow, aniline yellow, auramin; among the metals, mercury in the form of vapor, silver and gold compounds. The compounds of cyanogen and gold were especially conspicuous, their effect surpassing that of all other substances; even in a dilution of 1 to 2 millions they checked the growth of tubercle bacilli. All these substances, however, remained absolutely without effect if tried on tuberculous animals. In spite of this failure I have not allowed myself to be discouraged from prosecuting the search for growth-hindering remedies, and I have at last hit upon a substance which has the power of preventing the growth of tubercle bacilli, not only in a test tube, but in the body of an animal. All experiments in tuberculosis are, as everyone who has had experience of them has sufficiently discovered, of very long duration; my researches on this substance, therefore, although they have already occupied me for nearly a year, are not yet completed, and I can only say this much about them, that guinea-pigs, which, as is well-known, are extraordinarily susceptible to tuberculosis, if exposed to the influence of this substance cease to react to the inoculation of tuberculous virus, and that in guinea-pigs suffering from general tuberculosis even to a high degree, the morbid process can be brought completely to a standstill, without the body being in any way injuriously affected. From these researches I, in the meantime, do not draw any further conclusions than that the possibility of rendering pathogenic bacteria in the living body harmless without injury to the latter, which has hitherto been justly doubted has been thereby established. Should, however, the hopes based on these researches be fulfilled in the future, and should we succeed, in the case of one bacterial infectious disease, in making ourselves masters of the microscopic, but hitherto victorious, enemy in the human body, then it will soon also be possible, I have no doubt, to obtain the same result in the case of other diseases. This opens up an oft-promised field of work, with problems which are worthy to be the subject of an international competition of the noblest kind. To give even now some encouragement to further researches in this direction was the sole and only reason why I, departing from my usual custom, have made a communication on a research which is not yet completed.

THE TREATMENT OF SUPPURATING CAVITIES WITH RIGID WALLS.

Kuester, Berlin (*Centralblatt f. Chirurgie*, 1890, No. 29). K. calls attention to the error committed by surgeons in the treatment of abscess cavities with rigid walls, in delaying opening of the same, and in frequent irrigations of the same after opening. He insists upon the following:

1. The earliest possible incision.
2. The incision must be made at the most dependent point.
3. In case of large cavities, a counter-opening is to be avoided as far as possible. He dwells particularly upon the subject of empyema, and describes his method of dealing surgically with this condition as follows:

After exploratory puncture, an incision is made at the lowest point of the dull percussion note, usually in the fourth or fifth intercostal space, giving exit to the accumulated pus. A probe is then passed through the wound to the posterior boundaries of the cavity and pressed firmly between the ribs posteriorly until its point is felt in an intercostal space, at which point a portion

of the superadjacent rib is resected. The opening thus made must be sufficiently large to enable the surgeon to obtain a view of the interior of the cavity. Should the lowermost portion of the cavity not have been reached by the first resection, a portion is removed from the subadjacent rib, until the junction of the diaphragm and inferior reflection of the pleura is reached. The cavity is then, under slight pressure, irrigated with a warm solution of salicylic acid, and the walls of the cavity carefully sponged of all traces of fibrinous matter, by means of a sponge in a handle, and through and through drain age established by drawing a tube from one opening to the other, and securing it. The wounds upon the anterior and posterior chest wall are covered by iodoform gauze, upon which is laid a cushion of moss, which may remain undisturbed for upwards of eight days. If, in case of a recent empyema, the lung begins to expand in the course of ten days, the through and through drain is substituted by a short tube through the posterior wound. The author anticipates that complete cure will follow this treatment, in recent cases, in from three to six weeks.

The author further treats of the treatment of cavities, which unlike the pleural, are surrounded upon all sides by rigid and unyielding walls; as for instance, empyema of the antrum of Highmore. Of the three methods usually employed for gaining access to diseased conditions of the antrum, K. chooses that which perforates its wall from the face, for the reason that the indications considered by him most important of fulfillment can but be followed out by this route (thorough cleansing of the walls, and the identification by the fingers of the different portions of the cavity). This is done subperiosteally, and the cavity is irrigated but once with an antiseptic fluid, and than tamponned with iodoform gauze. As soon as the suppuration becomes but slight (which sometimes occurs in a very short time), the iodoform gauze is removed and a small drainage tube substituted therefor. In empyema of the frontal sinuses, K. drains through the nose. Diseased conditions of the mastoid cells and of the cavity of the tympanum belong to this division of the subject; their treatment, however, is somewhat complicated, as compared to the others, the preservation of the hearing, as well as the prevention of brain complications, entering into the question. The same principles, namely, early and free opening, however, should be followed.—Fowler, in *Brooklyn Med. Jour.*

MODERN TREATMENT OF STRABISMUS.

In the paper the author contrasted the idea formerly prevalent, that the squint operation is very easy of performance, and requires no special accuracy in the estimation of the amount of deviation present, with the modern view that the correction of strabismus should be preceded by the most careful and accurate tests, and that the operation should be a graduated one, controlled by the most precise examinations made before and during its performance. Adopting Mauthner's division of squint into spastic, accommodative, concomitant and paralytic, he pointed out that the first two varieties were in the main to be corrected by fulfilling the causal indication; *i. e.*, spastic squint, being usually due to hysteria, meningitis, or some other disease of central origin, requires treatment directed to these affections; while accommodative squint and strabismus exanopsia demand relief of the ciliary spasm by means of atropinization and correction of the faulty vision. In concomitant squint, the apparently obvious indication of tenotomy is by no means universally indicated, and he drew a strong line of distinction between cases with marked relaxation of the tendons, in which advancement (including sometimes, even advancement of the apparently contracted tendon) was required, and cases with too great tension of the tendons, in which tenotomy (including even, perhaps, tenotomy of both of two opposing tendons) was demanded. He cited a remarkable example of a case of squint, with tendon relaxation, in which a divergent squint was rendered less by advancement of the external rectus, and quite cured by advancement of all four of the lateral recti. In paralytic squint after briefly adverting to the general inutility of constitutional treatment, he enunciated Alfred V. Graefe's rules for the operative treatment. These are, in brief, to do the compensating operation (tenotomy of the associated antagonist) wherever possible, *i. e.* in paresis of the internal and external recti, and of the superior and inferior oblique; to do tenotomy of the direct antagonist only in paresis of the lateral recti, and then only as an adjuvant to the compensating operation; and to advance the paretic muscle in paresis of the superior and inferior recti, and also in paresis of the lateral recti when the preceding operations are insufficient. He cited two cases of paresis of the superior oblique seen by himself, one of which he had successfully treated by operation; and one case each of paresis of the superior and of the inferior rectus, likewise successfully treated according to V. Graef'es rules.—Dr. Duane in *Va .Med. Monthly.*

HYDROSALPINX AND PYOSALPINX.

Dr. Landau (*Nouv. Arch. d' Obstetrique et de Gynecologie*, 1890) read in the Section of Obstetrics and Gynecology, at the Berlin meeting of the International Medical Congress, an excellent paper on the treatment of fluid collections in the tubes. He considers that the diagnosis of a tubal sac is not necessarily an indication for its extirpation. Since such an operation involves many dangers, even after recovery from its immediate effects, the precise indications which justify it must be accurately determined. Dr. Landau first discusses hydrosalpinx. That disease may undergo spontaneous cure; cases of intermittent hydrosalpingitis indicate how cure can take place. The methods of effecting cure without mutilation are "orthopædic" and surgical. The

"orthopædic" methods are rectification of a displaced uterus, massage, catheterization of the Fallopian tube, and dilatation of the uterus. Rectification of a retroversion or other displacement favors the escape of the contents of the dilated tube, as in intermittent hydrosalpingitis. Massage, properly performed, has the same favorable effect. This practice also causes the breaking down of adhesions of the tube, whether with other parts of itself or with the uterus and other adjacent structures. The tube is thus set free, and contractions of the muscular coat excited. Dr. Landau rejects catheterization of the tubes. An elastic sound cannot be introduced into the uterine orifice of the tube; a rigid instrument is dangerous. Dilatation of the uterus is difficult and very uncertain. The process involves manipulations which may rupture a suppurating tube, or cause a simple hydrosalpinx to suppurate. The surgical proceedings, short of salpingotomy or castration, which may cause pendulous abdomen or grave nerve complications, are puncture by the vagina or incision. When puncture of the dilated tube through the vagina is practised strict antiseptic precautions are called for. By pressure on the abdominal walls the tumor is pushed well downward. A special trocar, guided by the finger, is pushed into the dilated tube without the aid of the speculum, and without any fixing of the uterus by forceps, etc. Great care must be taken to avoid the entrance of air, and aspiration should never be attempted. With these precautions the neighboring organs and the vessels are not damaged, and, as a rule, are hard to damage. The above proceeding Dr. Landau terms "palpatory puncture." It may prove sufficient by allowing contraction of the muscular coat, its effects then resembling the phenomenon which occurs when the membranes are punctured in pregnancy. Should the flaccid tube fill once more after puncture the process may be repeated, the cavity being washed out with a 3% solution of carbolic acid, or tincture of iodine may be injected into the empty sac. Leaving a canula in the sac is not advisable. In obstinate cases of refilling incision may be performed. In a long series of cases where Dr. Leopold has employed the method of simple puncture of the tube, he has opened by mistake ovarian, parovarian and hydatid cysts and tubal fœtal sacs, without fatal results.

Low Railroad Rates for the Holidays.—The Missouri Pacific Railway greets all its friends with a wish for the Merriest Christmas and the Happiest New Year, and takes pleasure in offering greatly reduced round trip rates to enable them to visit their friends at any point on this road, not over 200 miles distance. Tickets are on sale December 24, 25 and 31, and January 1, good to return until January 10. For tickets and all further information, apply to your local ticket agent.

Bloodless Tonsillotomy.—Prof. J. Toison, of Lille, (*Rev. de. Ther. Med. Chir.*, October 1) discusses the various methods of reducing or removing enlarged tonsils. He begins by saying that excision of the tonsils with the bistoury or the guillotine is gradually losing favor among surgeons on account of the risk of hæmorrhage. Ignipuncture with the thermo-cautery or the galvano cautery is often useful, but should be reserved for cases in which the tonsils are only moderately enlarged and can be sufficiently reduced in one or two sittings, and for cases in which some anomaly of shape in the hypertrophied glands makes it difficult to remove them with a cutting instrument. For ordinary cases, Prof. Toison uses a new snare of his own invention, which, according to him, effectually obviates all danger of bleeding. The apparatus consists of a *serre-nœud*, the metallic loop of which, instead of being free, is fixed by three silk threads to a blunt ring fixed to the distal end of the instrument. The ring is passed over the tonsil, which is then seized with forceps; the wire loop is next pulled home in the usual way, the traction being sufficient to snap the silk threads which fix it temporarily to the ring. The tonsil is thus cut through without bleeding. Prof. Toison has preformed this operation several times since last April; in no case has there been any hæmorrhage.—*Br. Med. Jour.*

Castor Oil is a drug which has not yet been, and is not likely to be, altogether supplanted by its more modern rivals, says the *Br. Med. Jour.*; nevertheless, it has been found that patients often decline to take it, and choose some more palatable, but less efficient substitute. The best way of taking castor oil is thoroughly to mix the dose with about four times as much hot milk; that is most effectually accomplished by shaking the two together in a bottle which they do not more than half fill. When taken as above directed, the activity of the oil appears to be increased, and, being rendered very limpid by the hot milk, its oily nature is not perceived. Children take it very readily in this form, in which, indeed, it is scarcely distinguishable from rich milk.

Hot Water for Sleeplessness.—A most wretched lier-awake of 35 years, who thought himself happy if he could get 20 minutes' sleep in 24 hours, said: I took hot water—a pint, comfortably hot, one good hour before each of my three meals and one the last thing at night—naturally unmixed with anything else. The very first night I slept for three hours on end, turned around and slept again till morning. I have faithfully and regularly continued the hot water, and have never had one bad night since. Pain gradually lessened and went, the shattered nerves became calm and strong, and instead of each night being one long misery spent in wearying for the morning, they are all too short for the sweet, refreshing sleep I now enjoy.—*London Spectator*

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service.

FOR THE WEEK ENDED NOVEMBER 22, 1890.

Fessenden, C. S. D., Surgeon. Granted leave of absence for 14 days. November 22, 1890.

Austin, A. W., Surgeon. Detailed as chairman of Board of Medical Officers to convene in Washington, D. C., December 1, 1890. November 19, 1890.

Irwin, Fairfax, Surgeon. Detailed as member of Board of Medical Officers to convene in Washington, D. C., December 1, 1890. November 19, 1890.

Kinyoun, J. J., Ass't Surgeon. Detailed as Recorder of Board of Medical Officers to convene in Washington, D. C., December 1, 1890. November 19, 1890.

Woodward, R. M., Ass't Surgeon. Granted leave of absence for 14 days. November 21, 1890.

Condict, A. W.. Ass't Surgeon. To proceed to Cairo, Ill., for temporary duty. November 19, 1890.

Stimpson, W. G., Ass't Surgeon. To proceed to Cape Charles Quarantine for temporary duty. November 20, 1990.

Promotion.

Kinyoun, J. J., Passed Ass't Surgeon. Commissioned as Passed Assistant Surgeon by the President. November 21, 1890.

Appointment.

Cofer, L. E., Ass't Surgeon. Commissioned as Assistant Surgeon by the President. November, 21, 1890.

While cross-examining Dr. Warren (says the *Montreal Weekly News*) a New York counsel declared that doctors ought to be able to give an opinion of a disease without making mistakes.

"They make fewer mistakes than lawyers," responded the physician.

"That's not so," said the counselor; "but doctors' mistakes are buried six feet under ground, and lawyers' are not."

"No," replied Warren, "but they are sometimes hung as many feet above ground."

Low Railroad Rates for the Holidays.—The Iron Mountain Route greets all its friends with a wish for the merriest Christmas and the happiest New Year, and takes pleasure in offering greatly reduced round trip rates to enable them to visit their friends at any point on this road, not over 200 miles distant. Tickets are on sale December 24, 25 and 31, and January 1, good to return until January 10. For tickets and all further information, apply to your local ticket agent.

USEFUL FORMULÆ.

Treatment of Hæmoptysis.—The *Canada Med. Record* advises the use of the following mixture in hæmoptysis:

℞ Tr. digitalis, - - - - ʒjss.
Ol. terebinth, - - - - ʒiij.
Ol. menth. pip., - - - ♏xx.
Acid. sulph. arom., - - - ʒiij.
Spt. vin. rect., - - - ʒxvj.

M. S.: Forty to sixty drops well mixed with sugar, to which one or more tablespoonfuls of water may be added every two, three or four hours, according to the urgency of hæmorrhage.

Amenorrhœa.—Dr. Nisalo, *Gaz. de Gyn.*, gives the following formulæ for the treatment of amenorrhœa:

℞ Decoction of barley, - - ℥xiij.
Mucilage, - - - - - ʒv.
Water of ammonia, - - gtt.xl.—M.

The above is for vaginal injection, and should be used four times daily. Simultaneously, the following should be given internally in three doses:

℞ Absinth water, - - - - ℥iv.
Syrup of saffron, - - - - ℥j.
Orange-flower water, - - - ℥ss.
Castor oil,
Savine oil, - - - - aa gtt.ij.—M.

The Removal of Freckles.—The *Pharmaceutical Record* quotes the following prescriptions for removing freckles:

℞ White precipitate,
Bismuth subnitrate, - - aa ʒj.
Glycerite of starch, - - - ℥iv.—M.

Apply every second day. Or,

℞ Sulphocarbolate of zinc, - - ʒj.
Glycerin, - - - - - ℥ij.
Alcohol, - - - - - ℥j.
Orange-flower water, - - - ℥jss.
Rose water, sufficient to make, - ℥viij —M.

Apply twice daily.

Whooping Cough.—

℞ Powdered belladonna root, - gr.1/5.
Dover's powder, - - - - gr.ss.
Sublimed sulphur, - - - gr.iv.
White sugar, - - - - gr.x.

M. Sig.: Take in one dose from two to ten times a day, according to age of patient and effect produced.—Germaine See, in *Jour. de Medicine.*

Salolized Collodion.—In both acute and chronic rheumatism the following will serve as an excellent application to the joints:

℞ Salol,
Ether, - - - - aa parts, 4.
Collodion. - - - - " 30.—M.

ORIGINAL ARTICLES.

FOREIGN BODIES IN THE EAR.

BY J. B. SHAPLEIGH, A.B., M.D., ST. LOUIS.

Read before the St. Louis Medical Society, 1890.

MR. PRESIDENT.—GENTLEMEN:—I desire to present the clinical histories of two cases which may be of some intrinsic interest, and may offer some suggestions as to what is and what is not to be done under similar conditions.

Case I.—Dr. G. consulted me on September 25, 1890, on account of an uncomfortable feeling in the left ear, with some slight impairment of hearing. The trouble had begun about two weeks previously, rather suddenly, and without inflammatory symptoms. Inspection showed the auditory canal to be entirely ree from cerumen, and its walls not congested; the drum membrane was uniformly and decidedly thickened.

Lying in the canal was a long, dark body, its cross-section presenting a gray metallic luster. Manipulation with the probe was painful and showed the foreign body to be hard, smooth, freely movable from side to side, and up and down, but apparently attached by its inner extremity to the lower part of the drum-head.

Its appearance suggested at once the lead from a pencil, though the patient denied scratching his ear at all, and was positive he had never used a lead-pencil for the purpose.

Removal was easily accomplished with he dressing forceps, but little resistance to traction being offered.

It was then found to be as supposed, a piece of lead about half an inch long.

The sharpened end was directed inward, and the peculiar grayish appearance presented to the eye was due to the fracture.

On the lower part of the drum-membrane, where the the lead had rested, was seen after its removal [illegible] k spot, surrounded by a narrow line of congestion and presenting the appearance of a minute perforation. Whether there was a complete perforation or not I do not know. A gentle inflation by Politzer's method gave no whistle, though the air entered the tympanum. In view of the thickened condition of the membrane, I think it possible that its tissue wa [illegible]rely indented.

The only explanation that the patient could give to account for the presence of this unusual tenant of the auditory canal was that it might have been placed there by his child.

After its removal, however, the following additional points in the history were learned.

After the uneasiness in the ear had persisted for several days he consulted a fellow practitioner about it. The doctor recognized the presence of a foreign body and attempted its removal. Up to this time there had been discomfort merely, but the manipulation caused such severe pain that the patient would allow no further interference.

Undoubtedly it was at this time that the foreign body, hitherto lying loosely in the meatus, was forced into or through the membrana tympani.

There was no after-treatment and I have since received a letter from the doctor stating that the ear felt all right.

Case II.—John R., æt. 3½ years, was brought to the ear clinic of the St. Louis Medical College on March 5, 1890.

The parents gave the following history: On the day previous, the child, in play, had placed a tack in the right ear. The tack was one of those with tinned heads, such as upholsterers use, and the point had been broken off, leaving only a short stem.

The child was at once taken to a doctor, no attempt at extraction having been made. This physician failing in his efforts to remove it, another was sought, who, on examination, thought he saw the tack, but called a consultant. The latter did not see it, but the child was nevertheless, chloroformed, and attempts were made to extract the foreign body, of whose actual presence in the ear there was such doubt. These misdirected procedures failing, as they naturally would, the child was brought to the clinic.

These gentle manipulations had so terrified the child that any examination was possible only under chloroform.

Examination.—There was a profuse sero-purulent discharge from the right ear. There was found in the concha a large abrasion, and a laceration, beginning near the root of the helix, extended into the external meatus. The walls of the auditory canal were so swollen as to completely close the opening, and rendered inspection of its deeper parts and of the drum-head impossible.

A probe carefully introduced met a hard body at about the depth of the membrana tympani. Politzer's inflation gave the characteristic perforation whistle.

No attempt was made to remove the foreign body; the canal was gently syringed and boric acid powder in sufflated. The parents were directed to syringe the ear with boiled water and apply the boric acid twice a day.

Under this treatment the swelling of the canal subsided rapidly, so that by the 7th it was fairly patent. It was then found that the laceration above mentioned extended along the roof of the meatus for about half an inch, and that the soft parts formed a flap hanging loosely in the canal. The tack was plainly visible, lying with its stem upward and partly within the tympanic cavity. By means of the blunt hook passed around the stem it was easily removed without the knowledge of the child, who had by this time become accustomed to the introduction of cotton mops.

Its removal revealed a large rent in the lower part of the drum membrane.

The boric acid was continued, the flap in the canal being supported as well as possible by cotton plugs.

Usually lacerations of the canal heal rapidly, but this one showed no disposition to unite, and it was not until the 14th that the reason became apparent. On this date the parents brought me a portion of a Gross' ear spoon which had worked its way out of the ear where its presence had been entirely unsuspected. They then informed me that one of the physicians in his manipulation had broken his instrument. The spoon must have been concealed in the laceration, which it had undoubtedly caused, and thus prevented healing.

From this time improvement was rapid, and the child was brought to me very regularly.

On March 27, the canal was entirely healed, the discharge very slight and the perforation closing. Hearing seemed to be good. The patient was not seen again.

Illustration—Actual Size.

These histories offer some suggestions for the treatment of such cases, which, though not new, may bear repetition.

In the first place they show that in most cases there is no imperative demand for the instant removal of a foreign body from the ear. Many cases have been reported where the foreign body had remained for years, quietly resting in the auditory canal, without causing even discomfort.

My own experience furnishes a case in which the patient had unknowingly carried a grain of wheat in her ear for 18 years.

This is contrary to the opinion of the laity, who are deeply impressed with the idea that anything, once it has gained access to the sacred precincts of the ear, loses thereby all the innocuous qualities it may naturally possess, and acquires at once a mysterious potency for harm that justifies any effort for its removal.

Unfortunately, some physicians seem to be of the same opinion, and from this, or impelled by the urgent demands of parents or friends, attempt the removal of the intruder as they would the extraction of a refractory molar, *vi et armis*.

Often these attempts are unsuccessful; too often, should they by any chance succeed and the enemy be driven from his position, the field of action offers bloody testimony to the severity of the struggle.

That there may be times when immediate removal of a foreign body from the ear is imperative, I do not dispute. Such are, for example, cases where corrosive substances have entered the canal, or where the escape of accumulated secretion in the middle ear is so hindered by the obstruction as to threaten serious complications.

These are, however, only the exceptions which emphasize the general statement.

In the second place the injury in these cases was due, not to the foreign bodies themselves, but to the unskilful and barbarous efforts made for their removal.

This again is the rule, for in most cases removal can be easily accomplished by proper manipulation, provided there has been no prior interference. Usually, however, some officious individual will be found, willing to try his hand before skilled assistance is sought. Unfortunate, as this is, it cannot be permitted, but the efforts of the professional man should be logical, careful and gentle. Any such brutal and blundering manipulation as was made in the second case here reported is unjustifiable and genuine malpractice.

Again, these cases show the importance of the first efforts at removal, and the liability of their failure to render subsequent attempts more difficult.

In each of these cases it happened that the extraction was readily accomplished, yet it would certainly have been still more readily done had there been no previous interference, for in each, prior manipulation had driven the object deeper into the canal, and in the second one had rendered any further attempts impossible for two days.

It seems to me that this is a very important point to bear in mind, and that it is much better to make no effort at removal than an unsuccessful one.

A detailed description of the various methods employed for the removal of foreign bodies from the ear would be here out of place, but a few general suggestions on this point may not inappropriately close this report.

It would seem ridiculous in these days to suggest that the operator should see the object he is attempting to remove, both before and during his manipulation, were it not for the testimony of the second case.

Every physician should be competent to examine an ear in so far, at least, as to ascertain the presence and position of a foreign body, or he should make no effort for its removal.

These points being determined, the next thing is what instrument to use.

This choice is dependent both on the nature and position of the obstruction itself, and on the individual skill of the physician.

The specialist and those accustomed to the manipulation of instruments in the ear, will often find the forceps, blunt hook or curette, most convenient and efficient. In skilled hands they are safe; no others should

use them. The objection to their general employment lies in the liability to injure the ear, or to force the object still deeper into the canal.

I should restrict the unskilful and those having no practical experience in the use of aural instruments to the syringe. In the majority of cases of non-impacted foreign bodies it will prove safe and efficient. It should not be employed in any other.

It is the reflux current and not the direct stream that is to be depended on for success. This explains why the instrument is only suited to those cases in which there is an opening through which the stream may pass beyond the object, and indicates how it is to be directed—never against the exposed surface of the obstructing mass, but alongside of it. When the syringe fails, individual skill should decide whether further procedures are to be undertaken or not. It should in all cases be remembered that whatever is done should be done deliberately, carefully and gently, and under good illumination.

PROGRESS IN ABDOMINAL SURGERY.

BY F. G. THOMPSON, M.D., C.M.,

Professor of Physiology, Ensworth Medical College, St. Joseph, Mo.

Read before the Missouri Valley Medical Association, Council Bluffs, Ia., September 17, 1890.

Perhaps no branch of our art has had a greater attention paid to it, or made more satisfactory progress in the last ten years than abdominal surgery. In this paper I have nothing new to offer the profession, my endeavor being simply to enumerate some of the changes in the mode of management by which we have gained a high degree of perfection as is evidenced by our present statistics. But our advance is not limited to results alone as compared with the work of surgeons at that time, for we now perform operations with impunity every day that they never attempted; or if they did it was more as a result of mistaken diagnosis. There is hardly any limit to the field of the surgeon in these days; it includes injury or disease of every organ in the abdominal cavity and even the old time feared peritoneum itself, while ten years ago the knife of the operator was almost exclusively restricted to ovariotomy alone. Wounds of the various organs are now cut down upon, washed clean, stitched and dressed, with comparative ease and the results are marvelous. Even where the wounds cannot be found (as in intestines it sometimes occurs), the assistance we offer nature, by thorough cleansing and drainage greatly increases our chances of success.

General surgery has also been much benefited by the careful attention to detail which has continually marked the progress of abdominal surgery, and has set many examples which have been followed by the general surgeon with great improvement. As ovariotomy may fairly be taken as a standard for my purpose in this paper I shall confine myself principally to it.

According to the statistics of Sir Spencer Wells, in 1876-7, of one hundred and fifty operations there were twenty-nine deaths, that is 19.3%, and of this number twenty-three were due to septic peritonitis. This was a very high mortality and proved to be a decided check to abdominal surgery, but when we look back with our present knowledge to assist us, its causes are not hard to discover. 1. They had a poor knowledge of the peritoneum, and its powers for absorption—both for good and bad. 2. The mode of treating the pedicle was imperfect. 3. The clamp, from the opportunity it offered for septic infection, secondary hæmorrhage, and tedious convalescence was a prominent factor of this high rate of mortality; and its abandonment in 1878 for the intra-peritoneal ligature was one of the first prominent features in the advancement of abdominal surgery. The use of the intra-peritoneal ligature previous to this was more as a makeshift when the clamp could not be used in cases of short pedicle. Lister's teaching came next and we have made great strides since then. It has caused us to pay more attention to the value of surgical cleanliness, which with drainage and flushing of the peritoneal cavity, has completely revolutionized the practice of abdominal surgery. The tubes for drainage purposes were of glass, but of such size that the defective methods used for the prevention of putrefaction of the fluids which oozed through them rendered them unsatisfactory. Smaller ones, however, were introduced, and perfected precautions were soon effected against septic decomposition. The plan of flushing is now carried out successfully, but is generally confined to those cases where injury, or rupture of the abdominal organs, occurred, and is usually associated with subsequent drainage, especially if there be excessive oozing of fluid or blood. A good rule has been laid down "to drain when in doubt." An excellent plan is to leave a few strands of gauze in the tube by which its capillary attraction keeps up a constant stream. The use of antiseptics is a vexed question, eminent men declaring in its favor, while others, equally successful, denounce it.

Lawson Tait says it was opponents of Listerism who showed that it was cleanliness that was wanted and not germicides. That it is the soil we have to fear and not the seed. The weeds wont grow when the garden is kept in order, and it is to the preaching of Simpson and his school, and not to that of Lister, that our advances in this respect are due. This view led him to the plan of flushing out the abdominal cavity, and he cares not how many little beasts there were in the water so long as he got the dirt out. The logical conclusion of Listerism indeed was, and is, that dirt cannot matter. This was enunciated clearly by Lister's followers who declared in debate that they went to the operating room from the dissecting room and post-mortem table with light hearts, but we find that they went back to the tables with the same patients. Opium is now being more and more discarded, from the fact of its restraining influence on

absorption and excretion. And saline purgatives are being used even in the presence of symptoms of incipient peritonitis, with a view to increased excretion; but of course is contraindicated by impaction or obstruction. The records of the Samaritan Hospital for three separate periods in the last twelve years show a marked improvement in the decrease of mortality. In 1878 and 1879 there were one hundred and seventy operations, of which twenty-four proved fatal, equal to 14.1%; in 1886 and 1887, there were one hundred and forty, of which ten died, equal to 7.1%, and in 1888 and 1889 there were one hundred and thirty operations, six deaths, showing a mortality of 4.3%. The operations on uterine tumors ten years ago were very unsatisfactory. Prior to 1888 Sir Spencer Wells had operated on seventeen cases, eight proving fatal, or a rate of 47%.

Koeberle's serre-nœud was first used by Keith in 1873. A great deal of difficulty is experienced in dealing with the uterine stump in some cases. The most successful method we have is perhaps the extra-peritoneal treatment of the pedicle, and the serre-nœud is usually employed for this purpose, its advantage being that it can be tightened as the tissue retracts, proving an efficient safeguard against hæmorrhage.

Eighth and Felix Streets.

LACERATED WOUND OF THE AXILLA FROM A BARBED WIRE.

BY GEO. N. LOWE, M.D., RANDALL, KANSAS.

Read by title before the Mississippi Valley Medical Association, Louisville, October 10, 1890.

The infreqency of lacerated wounds in the region of the axilla with a barbed wire, complicated by three other severe lacerations in different regions of the body, at the same time a serious contused wound of the right thorax, in a patient who had approximated to senescence and corpulence;—the necessity of having to combat the results of depletion caused from hæmorrhage and the shock, together with the intensity of heat from an August sun, and other complicating influences which are frequently ushered upon a surgeon in a domiciliary practice, being considered, with a successful termination, form my only plea for the contribution of this report.

August 3, 6:30 P.M., I was summoned in haste to visit Mrs. McKenzie, residing in the country; she had been severely wounded and was supposed to be dying from a wound received by becoming entangled with a horse in a barbed wire fence. The horse, in attempting to liberate itself from the wires, had fallen twice upon the patient, inflicting, with the wire, a serious contusion of the right thorax, and a deep laceration in the right axilla, as well as other regions of the body, and producing a severe hæmorrhage and shock, which caused considerable alarm among relatives and friends present.

I reached my patient at 7:20 P.M. She had been carried in the house, and placed upon a cot. The patient was of Scotch birth, æt. 57 years, medium in stature, weight, 210 pounds; previous health good. She was suffering from great exhaustion and shock. I hastened to the examination of the patient, and secured bleeding vessels as soon as possible with hæmostatic forceps, until I could secure the vessels by ligature and torsion, at the same time resuscitating the patient with restoratives.

The examination revealed a severe ragged laceration in the right axilla, a second laceration at the lower third of the right humeral region, and a severe contusion of the right thorax anteriorly and posteriorly; also two severe lacerations of the right thigh.

As the axillary wound was the most serious and the source of greatest hæmorrhage, I gave it my earliest attention. The wound in this region commenced at the lower border of the tendinous portion of the pectoralis major, and terminated at the spine of the scapula, in line with the scapular notch down to, but not involving, the capsular ligament. All muscles, vessels and nerves were severed in this region, except the axillary and brachial arteries, and the median nerve which was retained in a thin septum of muscular and nervous tissue.

This laceration was so extensive that I was astonished to find the preservation of those main trunks of vessels and nerves. The only explanation I can give for this is that they were lodged in the interspace of the barbs on the wire. After all ragged edges were pared smooth, and bleeding vessels secured with catgut ligatures and torsion, the axilla was shaved and rendered antiseptic, the wound was closed with silk. Drainage was provided for. The muscles were held in position with strong adhesive strips, dressing materials and bandages. The laceration at the ower third of the right humeral region was oblique to the axis of the limb, three inches in length, and completely severed a t ..e down to the periosteum.

This and the wounds of the thigh, not so deep, were treated in a similar manner.

The contusion of right thorax was severe anteriorly and posteriorly; there was crepitation in the fourth, fifth, and sixth right costal interspaces. This region was a dark mass of contused tissue.

I dressed the wound antiseptically with absorbent cotton, and the many tailed bandage; unloaded the bowels by enemata; gave per oram milk, eight ounces; brandy, half ounce; followed by a half grain of morphine. In three-quarters of an hour the patient was resting quite comfortably.

I saw the patient on the next day. As she was complaining of great soreness and pain in right thorax, and the temperature had shot up to 102° F., pulse 85, respiration, 19, I redressed the contused wound of the thorax, and applied compresses saturated with linimentum camphoræ compositum to the contused parts, to be repeated every five or six hours. Salts were given, and aconite and morphine enough to keep the patient quiet.

The salts operated freely in five hours, after which the patient rested more comfortably.

August 5, she was resting comparatively well. Temperature 101°, pulse 78, respiration 18; continued treatment same as before, without the salts. Redressed wound in axilla; conditions of wound good.

August 6. Patient resting reasonably well. Temperature 100°, pulse 75, respiration 17. Redressed wound on the limbs, all of which were improving.

After this, improvement was rapid; healing by first intention was secured for the wounds of the extremities, and for the greater part of the thoracic wound.

I discharged my patient September 1, 1890.

The points of interest in this case are, first, the severity of wounds, age of patient, the excess of adipose tissue, and the extreme heat of the weather. Second, a speedy recovery without complications.

DIET FOR DIABETICS.

Arranged by BRANSFORD LEWIS, M.D., Lecturer on Genito-Urinary Diseases, Missouri Medical College, St. Louis.

ALLOWED.	PROHIBITED.
All kinds of meats (except liver). Poultry, all kinds of game.	Liver.
All kinds of fish, fresh or salt, sardines.	Sugar, in any form.
Oysters.	Starch, in any form.
Eggs in any style (without addition ot flour, starch or sugar.)	Sauces containing flour, sugar, or starch.
Fats and fatty meats.	Cakes of all kinds.
Butter, cheese.	All cereals, such as cracked wheat, oatmeal, mush, cerealine, etc.
Soup (without flour or the prohibited vegetables.)	Potatoes (eithe Irrish or sweet,) corn, carrots, turnips, hominy, parsnips, beans, peas, beets, rice.
Celery, cabbage, cauliflower, string-beans, asparagus, lettuce, spinach, mush-rooms, radishes, cucumbers (green or pickled), young onions, water cresses, slaw, olives, tomatoes.	
Graham bread, rye bread. Occasionally stale light (white) bread.	White bread, corn bread, white biscuits.
Acid fruits, such as oranges, lemons, apples, plums, cranberries, currants, cherries, straw-berries, goose-berries (sweetened, not with sugar, but with saccharine and sod. bicarb.)	Pears, peaches, grapes.
Gelatine (without sugar)	Sweet jellies.
Almonds, walnuts, Brazil nuts, hazel nuts, filberts, pecans, butternuts, cocoanuts.	Chestnuts.
Salt, vinegar, pepper.	
Drinks: Coffee, tea (without sugar), skim-milk, cream, soda-water (without syrup), mineral waters of all kinds, but especially vichy.	Malt liquors, beer, ale.
Claret, Rhine wine.	

DIABETES IN CHILDREN.—Stern has collected 117 cases, and believes the disease is not rare in early life. —*Albany Medical Annals.*

TRANSLATIONS.

FROM THE FRENCH.

BY JOSEPH GRINDON, M.D., ST. LOUIS.

ESSAY ON THE PROPHYLAXIS OF TUBERCULOSIS AND THE SUBSTITUTION OF THE SHE-GOAT FOR THE HEIFER AS A VACCINIFER.

The recent work with the above title by MM. G. Bertin and Picq, is reviewed as follows in *La France Medicale*, for August 8:

"The authors were struck with the frequency of the occurrence of tuberculosis in horned cattle, and with the consequent peril arising from the use of the heifer as a vaccinifer. MM. Malvoz and Bronwier have shown that transmission of the tubercle bacillus by the placental blood is as frequent in the bovine as in the human species. It is likewise well known that milk from a tuberculous udder is infectious.

Germain Sée does not believe in the dangers of inoculation by vaccination. Why then should we urge the fear of glanders as a reason for not vaccinating from the horse?

The experiments conducted by Toussaint of Toulouse, on the contrary go to prove the possibility of the transmission of tuberculosis by vaccine taken from a tuberculous heifer. Goats, on the contrary are absolutely refractory to tuberculosis.

MM. Bertin and Picq therefore made use of the latter animal in their experiments. They arrived at the following conclusions:

1. Humanized and bovine virus produce in she-goats phenomena which coincide exactly in their march with those in man.

2. Vaccination from goat to goat pursues an evolution similar to that from heifer to heifer.

3. Goats are insusceptible to tuberculous inoculation.

This animal, say the writers, presents the following advantages, cleanliness, tameness, cheapness and immunity from syphilis and tuberculosis. It should therefore be given the preference as a vaccinifer.

ABLATION OF LIVER-TISSUE BY MEANS OF THE RUBBER BAND.

M. Terillon reported before the Academie de Medecine (August 12) the ablation of a piece of liver containing several hydatid cysts by means of an India-rubber ligature.

A woman, æt. 53 years, had for five years had a painful tumor continuous with the right border of the liver. A small quantity of colorless liquid having the composition of that extracted from hydatid cysts was removed by an exploratory puncture. The tumor having somewhat diminished in size, an incision was made under the right false ribs. A piece of liver the size of two fists and stuffed with small hydatid cysts was drawn

without the abdomen. In spite of numerous punctures made into these cysts the total volume of the tumor remained quite large, and it was seen to be necessary to remove it. As there was no pedicle, but on the contrary the tumor was continuous by a broad base with the rest of the organ, ablation threatened considerable hæmorrhage. In order to avoid this, a rubber ligature was put about the mass at its narrowest point, and the affected portion thus separated from the mass of the organ was fixed outside the wound.

Six days later, the sphacelated portion was removed, together with the rubber ligature. There remained a surface of considerable extent formed by the mortified hepatic tissue which however, was separated from the peritoneal cavity by adhesions.

Six weeks later the wound had quite healed. The patient who had suffered greatly and had become much emaciated has gained flesh and now enjoys good health. —*Tribune Medicale.*

Infant Feeding.

Dr. Sachapelle gives, in *L'Union Medicale du Canada*, the following table to serve as an approximative rule in the feeding of infants. It will be noted that the amounts allowed are larger than those recorded by Dr. Kate Parker as the result of her investigations at the New York Infant Asylum, and quoted by J. Lewis Smith, in his book on children:

Age.	Intervals between meals.	Number of meals in 24 hours.	Mean quantity at each meal.	Mean quantity in 24 hours.
First week.	2 hours.	10	1 ounce.	10 ounces.
First to sixth week.	2½ hours.	8	1½ to 2 ounces.	12 to 16 ounces.
Six to twelve weeks, and if needful, until five or six months.	3 hours.	6	3 to 4 ounces.	18 to 24 ounces.
At six months.	3 hours.	6	6 ounces.	36 ounces.
At ten months	3 hours.	5	8 ounces.	40 ounces.

Method of Administering Quinine in Intermittents.

1. The action of quinine is felt only six hours after its administration. In order to secure the maximum effect it is therefore necessary to give the drug six hours before the seizure which we wish to influence.

2. Since, in quotidian, for example, the apparent inception of the seizure is marked by a chill, it is a mistake to give the drug six hours before the chill as it is not then given sufficient time to act, the real beginning of the attack having taken place about two hours before the chill. The quinine should therefore be given eight hours before the chill is expected.

3. The variations noted in the interval between the real and apparent inception of the seizure in various types of intermittent permit the formularizing of the following rules:

a. In quotidian fevers quinine should be prescribed eight hours before the chill, or in other words, soon after the termination of the fever of the preceding day.

b. In tertians give the drug twelve hours before the the chill.

c. In quartans eighteen hours before the chill.

d. Quinine should be given in massive and not in fractional doses, because it is rapidly eliminated by the kidneys. As says M. Jaccoud, if one gives broken doses at long intervals, the total effect of the quantity prescribed will never be realized. It may at times be necessary to divide the dose for the sake of the patient's stomach, but the intervals should then be short, so that the full amount may be taken within three-quarters of an hour or at most an hour.—Dr. Charpentier, in *Annales de Therap.*

Antiseptic Dressing Without Bandages.

Socin, of Bâle, employs an antiseptic paste which adheres closely to the skin and does away with the use of bandages of plaster.

It is composed of oxide of zinc and chloride of zinc mixed with water in the following proportions:

℞ Oxide of zinc, - - - parts, 50.
Water, - - - - " 50.
Chloride or zinc, - - parts, 5–6.

Mix well.

The paste should be freshly made.—*Jour. de Med. de Paris.*

Tuberculous Endocarditis.

M. R. Tripier reports to the Academie des Sciences, a case of generalized miliary tuberculosis in which he found a tuberculous nodule on the under surface of the mitral valve on the upper surface of which was an acute endocarditis. This endocarditis presented in places an exudate which was found to contain similar elements to the tuberculous nodule, thus establishing the similar nature of these products.

This is the first case in which a tuberculous nodule has been found in the heart.

It still further establishes the idea of the generalization of tuberculosis by way of the vascular system, an idea which has hitherto derived its chief support from the presence of tuberculous lesions along the veins and lymphatics and the finding of bacilli within the circulatory apparatus. It also establishes the existence of acute tuberculous endocarditis, which is, by the way, almost constantly present on a mitral leaflet in acute miliary tuberculosis.

It is possible that this sort of acute inflammation may be the cause of the coexistence which has at times been noted of tuberculosis with an old cardiac lesion. These

facts however will not suffice to overthrow the idea of an antagonism between heart disease and pulmonary tuberculosis. It would seem to be the case that when there occurs a primary simultaneous localization of the disease in the heart and lungs, the lesions rapidly assume a greatly pre-ponderating importance in one of the two organs. The pulmonary lesions then oppose themselves to the development of the cardiac affection or *vice versa*.—*Lyons Medical.*

Local Treatment of Variola.

M. Talamon treats the pustules of variola with a spray of sublimate in ether. Starting with the idea of the pustule being due to the action of the specific germ on the cells of the lower layers of the rete, he believes that the pustules can be aborted by thorough antisepsis of the skin being practiced before the appearance of the eruption. This he essayed to bring about by spraying on a solution of an antiseptic in ether by means of a Richardson spray.

Etherized sprays offer the following advantages: 1st, the agent used can be evenly distributed over the area to be treated. 2d, it can be made to penetrate deeply into the upper layers of epithelial cells and the interstices between them. 3d, owing to the rapid evaporation of ether, a larger amount of the active agent is left on the surface than when an aqueous solution is used, which besides is objectionable on account of its wetting the bed.

Various substances were tried. The following gave tho best results:

℞ Acid citric vel tartaric,
Hydrarg. bichloridi, - - aa grs.xv.
Alcohol, (90°) - - - - ʒj.
Æther, - - - - q. s. ad ℥ij.

This was used three or four times a day, and continued until desiccation. No results were obtained in cases confluent from the first nor in hæmorrhagic cases. The pustules in coherent and discrete cases usually abort under this treatment.—*LeProg. Medical*, April, 19.

Abscess of the Liver.

M. Javeran has been investigating this disease as it occurs in hot climates, and finds the pus quite sterile, at least in ordinary culture media. Neither by bacteriological nor by histological methods could the presence of bacteria or of morbid bodies be shown.

It may be that the bacteria which occasion liver abscess die rapidly, perhaps on account of the admixture of bile with the pus. In some cases the pus is manifestly tinged with biliary pigment. On the other hand it may be that these organisms are not susceptible of cultivation in ordinary media.

The absence of pyogenic microbes or perhaps their rapid destruction in liver pus falls in with what we know of the slow and insidious march of these purulent collections.

This fact is interesting from a practical standpoint. The washing out of the cavity which is so useful after empyæma would seem to be bootless after the performance of Little's operation in liver abscess, since the pus contains no disease-germs; more especially as the washings might give rise to accidents due to the rupture of adhesions.—*La France Medicale*, August, 1890.

A Remedy for Palpitation.—Dr. Gingeot recommends as a valuable remedy for palpitation—one that has proved serviceable to him—the application of cold to the precordial region. Attention must be paid to the method of applying cold. The simplest plan of all is to apply a wet sponge over the heart in the morning before dressing. At night, when in bed, the patient or an assistant may put a cold compress over the heart, well covered with dry bandages, to retain moisture and prevent any wetting of the clothing. When this compress is warm, the patient may remove it, and will probably fall asleep. There are objections to the ice-bag, one being the condensation of insensible perspiration upon the surface of the skin. The ether spray is a simple and convenient method of refrigeration. With proper instruction as to necessary precautions in the use of ether, the patient can apply cold in this way at any hour of the day or night. Palpitation of purely nervous origin seldom fails to be greatly benefited by the application of cold; and a certain success often follows its use in cases of palpitation due to organic disease.

Equalizing the heart's action will often prevent an increase in its size. It is also useful in aneurism and passive dilatation.—*Rev. Gen. et Clin. et de Ther.*

The Removal of Moles.—Moles on the face are now being successfully treated by the use of sodium ethylate. The mole is painted with the sodium ethylate, a fine glass rod being used. When the mole has a varnished look, the ethylate is gently rubbed in with the glass rod to make it penetrate more deeply. The mole turns nearly black, and a hard crust forms over it, which is nearly three weeks in becoming detached. When it comes off, the mole is much lighter than before, and this treatment can be continued until the mark is scarcely noticeable.—*Buffalo Med. and Surg. Jour.*

Low Railroad Rates for the Holidays.—The Iron Mountain Route greets all its friends with a wish for the merriest Christmas and the happiest New Year, and takes pleasure in offering greatly reduced round trip rates to enable them to visit their friends at any point on this road, not over 200 miles distant. Tickets are on sale December 24, 25 and 31, and January 1, good to return until January 10. For tickets and all further information, apply to your local ticket agent.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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Entered at the St. Louis Postoffice as Second-class Matter.

SATURDAY, DECEMBER 13, 1890.

THE PREVALENCE OF SUBSTITUTION.

We recently heard the result of a little detective work done by one of the large drug concerns of the country, which surprised us as much as it probably will our readers.

Representatives of this firm presented prescriptions for quinine pills at ten drug-stores in Chicago; pills made by their company were plainly designated on each prescription, and a physician's name was properly signed. In the ten thus ordered, substitution was practiced in seven cases—other pills than the ones designated being given.

Startled by the extent to which substitution was practiced in this manner, the firm determined to try the same experiment in other cities, and the result indicated that the same state of affairs existed elsewhere. In Washington, of twenty such prescriptions, eight were properly filled, twelve were 'substituted'; statistics from Baltimore were about the same.

Of course there is no argument in support of the propriety of such practice on the part of the druggists; it is simply a question of reliability and honesty.

In view of these figures, our brethren will do well to occasionally carry out a little detective work on their own account. We are no doubt too prone to rely absolutely on the correctness and accuracy of our orders being filled, to write the initials of our favorite manufacturers, serenely expecting them to be drawn on, when in 70% the product of other firms is used.

There is another nuisance with which the physician is frequently annoyed. In addition to the patient's keeping the number of the prescription and going on having his bottle refilled indefinitely, he often thinks it quite proper that the druggist should give him a copy of the prescription itself. With this he may supply his friends as occasion requires, and save many an honest dollar thereby. And the druggist is not always averse to proving himself accommodating under such circumstances.

Verily, the druggist hath his faults as well as other people.

A MARVELOUS FEAT IN BRAIN SURGERY.

Our esteemed contemporary, the *St. Louis Medical and Surgical Journal*, in its December number, has the honor of recording a case of cranial surgery before which the brilliant achievements of Horsely and Bergmann must loose their lustre as the moon pales before the dawning blaze of the radiant sun.

In fact, to use a strong expression, these distinguished surgeons are not "in it;" their glory has departed.

The feat to which we refer is very briefly and modestly stated; to a captious reader the description might seem altogether too brief for the importance of the subject. The case is described by Dr. C. W. Watts, of Aux Vasse, Mo., in the course of a contribution on "Injuries of the Skull:" "In 1886, I was called to see Mr. S., æt. 23 years. He had been struck over the head with a loaded cane or whip-stock, three weeks previously. His symptoms consisted of a small tumor in the space of the anterior fontanelle. There was no abrasion of the skin and no sign of external injury to the bone, save the scalp tumor. He was sleepy and disposed to set around with his eyes half closed. There was loss of memory, impaired vision, sometimes double vision, with total blindness at other times. The doctors thought there was not much the matter.

"After an operation, I found a clot resting on the corpus thalmus and striatum, and effusion of serum. He recovered entirely in six months. Here there were both concussion and compression with effusion. But I will not trouble you farther than to say that we put the young man upon antiphlogistic treatment with medicines to aid absorption and tone up the system."

We shall await with avidity a more detailed description of the operation, and more especially of the method employed in reacting the optic thalmus and corpus striatum.

THE MIDWIFE QUESTION.

A topic which is at present arousing much attention in England is the question: "Are midwives to be abolished or bettered?" Though the harm done by ignorant midwives is probably as great in proportion in this

country as it is in England, the issue has not yet forced itself so prominently forward here, and has not, unfortunately, elicited the same share of discussion. A paper by James H. Aveling, M.D., Consulting Physician to the Chelsea Women's Hospital, in the *British Medical Journal*, presents the subject in a very clear light. Dr. Aveling gives 10,000 to 15,000 as the probable number of women acting as midwives in England and Wales. The population is 30,000,000 and the number of births annually is 300,000, estimating them at 30 per 1,000. Midwives attend 60% of these, or 540,000. Of the total number of women confined, 2 in every 100, or 4,500 die in childbirth. The deaths in cases of childbirth attended by physicians and skilled midwives are 1 in 600, and in those women attended by unskilled midwives, 3 in 600. According to this, the mortality would be reduced from 4,500 to 1,500 by educating midwives.

The question, then, is either to do away with midwives, or educate them. The former is shown to be impractible, in the first place, and secondly, undesirable, because good widwives are of service to the physician and there will always be a demand for them among the poor. It being conceded, for these and numerous other reasons, that it is preferable to better midwives instead of abolishing them, the next question that arises is as to the way in which it can be done. The remedies are: 1. A ready and inexpensive method of instructing women in elementary midwifery. 2. Local examining boards. 3. Each midwife to have a license. 4. The registration of license.

A bill now before Parliament embodying these provisions, requires the examination, licensing, registration, and supervision of midwives. The General Medical Council is to provide rules for conducting the examination. In order to guard against mistakes on the part of the public, "no unqualified person shall be entitled to take or use the name of midwife, or any name, title, or addition or description implying that she is registered under the act." The license will enable women to act as midwives "in cases of natural labor only." Disgraceful conduct, malpractice, or a breach of regulations will cause suspension or erasure from the register.

It is believed that this bill, if passed, will result in an immense improvement over the present situation. That affairs are also susceptible of betterment in this country cannot be denied by anyone at all conversant with the subject. The laws concerning the matter, when they exist, are not stringent enough; the education of midwives is in many institutions of the kind a mere farce. Where practicing midwives endeavor to carry out the laws of antisepsis and asepsis, it is in many cases done in a perfunctory and wholly inefficient manner, (unless under the direction of a physician) from want of comprehension of the principles involved, if indeed the women have in the first place anything beyond the dimmest notion of the existence of such a thing as antiseptics.

That this state of affairs should be vastly improved upon is beyond a doubt; but, like many other things, it will be difficult to obtain the concerted action necessary until the need of it is placed in the most glaring light. The unnecessary sacrifice of human life and health from sepsis, etc., due to the incompetency of midwives, which come to the knowledge of individual practicing physicians here and there, will continue until some effort is made to bring together and tabulate the cases.

Water in Disease.

Prof. Sahli, in the *Correspondenzbl. f. Schweizer Aerzte* (*Med. Chir. Rundsch.*) pleads for greater attention to hydro-therapeutics, and especially to the use of water internally and hypodermically in disease. He says that we have every reason to believe that most of the poisons, such as those of uræmia, diabetic coma, those responsible for the severe complications of infectious diseases, and those causative of the typhoid state, tetanus, etc., all leave the body in the urine. Unquestionably, therefore, the best antidote for such toxic states is increased diuresis. It is for this reason that digitalis is of such benefit in uræmia, the typhoid state, and diphtheritic intoxication, of course, however, only through its stimulant action upon the heart. Where, however, the heart is in excellent working order, and the kidneys also secrete in sufficient amount, in these cases there is, according to Sahli's experience, no better diuretic than water. Increased ingestion of water means increased diuresis in like proportion; it means not only increased excretion of the watery elements, but also of the solid circulatory matter; a veritable flushing out of the body occurs. Sahli attained this end by injecting a sterilized solution of sodium chloride, using a simple form of infusion apparatus. In the space of from ten to fifteen minutes a liter of this fluid was injected into the subcutaneous areolar tissue of the abdomen by means of a hollow needle. This acts in several ways; it brings about removal of the poison and washing out of the tissues by diuresis, dilutes the remainder of the toxic substances still circulating in the body; it brings water to tissues poor in fluids and therefore impaired in function, and also, probably, raises the blood-pressue by filling the vessels better. With these objects in view, the method of Sahli really proved itself of great value in uræmia and the typhoid state. It should be productive of equal benefit in the diarrhœas of infants, and in toxic conditions, especially those where the morbific agents are eliminated through the kidneys; also in diseases where water is essential and should be introduced into the body in a harmless manner, such as gastic and intestinal perforations, peritonitis and ileus. As a matter of fact, Sahli did observe a case of perforating ulcer of the stomach in a girl æt. 18 years, in which rapid encapsulation and recovery followed the treatment of in-injecting water subcutaneously. The contra-indications

of this method, which consists in the injection of salt solution, in the quantity of, at most, one liter once per day, are high grades of general œdema and threatening or existing œdema of the lungs. The treatment may be fortified by the simultaneous administration of digitalis as an adjunct.

Skin Grafts From the Dead Body.

Dr. Saphia S. Ivanova, of St. Petersburg, Russia, in the *Khirurgitchesky Vestnik* (*Annals of Surgery*) having a case of severe burn of the third degree, involving the whole leg and dorsum of the foot, in a poorly-nourished woman æt. 75 years, was induced to try the method of Drs. Bertens and Werner, of using skin grafts from the recent cadaver. In Dr. Ivanova's case the skin sloughed away in about two weeks, leaving an enormous freely-suppurating granulating surface. Shortly after this grafting was employed in two sittings, with an interval of three-and-a-half weeks, the grafts being obtained from the bodies of two new-born infants one-and-a-half and two hours after the death of the children. Between the time of excision and transplantation the strips of skin, varying in size, were kept in a 6% solution of sodium chloride at a temperature of 40° C. All the strips adhered in 48 hours, and the recovery was rapid and complete. The doctor advances the following conclusions, deduced from her case and that of Bertens and Werner:

1. The method offers undoubted advantages over Reverdin's plan in *a*, its securing an "incomparably more rapid" healing of lesions and hence very substantially lessening injurious effects of prolonged suppuration and lying in bed; *b*, its giving much better functional results (through preventing cicatricial contraction, etc.); *c*, the material is easily obtainable in abundance, and that without inflicting suffering or inconvenience to any human being. 2. The skin must be taken always from bodies of such patients who have not had syphilis, septicæmia or any other infectious disease. 3. The best material is afforded by bodies of new-born infants of healthy mothers, the infantile tissue possessing most energetic vitality. 4. It is advisable to employ rather long strips measuring not more than 2 or 3 centimetres in width. Small-sized pieces are easily washed away by pus blood. 5. Only the skin proper, freed from all subcutaneous cellular tissue, should be transplanted. 6. If the granulating surface be clean and non-atonic, no scraping is necessary. It is fully sufficient to previously thoroughly wash out the surface, after which the grafts should be carefully adjusted and slightly pressed down with dressing. 7. The best dressing material is gauze soaked in a boracic acid solution and then wrung out. The tissue absorbs secretions very well, never becomes adherent to grafts, and hence may be easily removed without disturbing the latter. 8. The transplantation must be practised as early as possible. Thus, in cases of deep burns it should be resorted to immediately after the separation of sloughs. When large-sized strips or pieces are used, even a free suppuration cannot prevent their adhering to the surface.

MEDICAL ITEMS.

Dentistry Among the Ancients.—A physician in Rome recently brought to light some interesting specimens of ancient dentistry and artificial teeth in skulls from different Etruscan tombs, dating as far back as the sixth century before Christ.

Albolene Emulsion.—According to the *Dixie Doctor*, to make an emulsion with albolene and an aqueous solution of a drug, it's only necessary to add two drops of castor oil to each fifteen drops of solution to be mixed with the albolene.

Electricity in Crematories.—A new departure in cremation is reported of a rather *Frenchy* character, the old method not being rapid enough. A patent has been taken out in France for an electric furnace for the rapid incineration of human remains.

Carbolized Oil in Scabies.—Tresilian, in the *Brit. Med. Jour.*, calls attention to the rapid and sure effects of carbolized oil (1 part to 15 of olive oil) in scabies, and also to the immediate local anæsthetic action of the remedy in removing the pruritus, for which patients are extraordinarily grateful.

Vaccination in Egypt.—According to *El Siglo Medico*, the Egyptian government will soon institute a system of compulsory vaccination. The law says that all children must be vaccinated before they have reached the age of three months, this being done at the expense of the state in the case of the poorer classes. Violations of this law are punishable by a fine or imprisonment.

A New Method of Bleeding in Pulmonary Congestion.—Dr. J. C. Simpson (*Lancet*) reports four cases of pulmonary congestion in which he drew blood from the lungs by driving an exploring needle directly into the tissue, withdrawing it, and then letting the blood flow out through a cannula. The operations were successful, though the patients all eventually died from other causes.—*Med. Rec.*

Eye Disturbances Caused by Tænia.—An interesting case is reported in *Annel Med.* (*Centrbl. f. Klin. Med.*). A young woman had suffered for a year with burning and pricking pains and a feeling as of grains of sand in the conjunctival sacs; her eyes were easily fatigued, and there was photophobia and on the slightest exertion of the eyes headache and vertigo. Hysteria was excluded, and an examination of the eye showed it to be quite normal, with the exception that

the acuteness of vision was somewhat lessened, and that the pupils seemed slightly dilated. On removal of a tape-worm all these difficulties permanently disappeared.

RIBERI PRIZE.—The Riberi prize for 1890 has been awarded to Dr. Panara Panfilo, Physician to the Military Hospital at Rome; and Dr. Joseph Brezzi, "Captain-Surgeon" (*Capitano Medico*) of the Vicenza Regiment of Calvary. The subject for the essay was the Prophylaxis and Treatment of Tropical Diseases, with special reference to the climate of the territories at prssent occupied by Italians.

HOSPITAL VISITS BY TELEPHONE.—*The Medical Bulletin* says that in some hospitals in Europe it is customary to allow visitors to converse on certain days by means of a telephone in a waiting-room with patients in the wards, and this arrangement has been found to work admirably, as it not infrequently happens that the nervous state of the patient or the possibility of infection of the visitor renders closer communication inadvisable.

CARBOLIC ACID SPRAY IN THE TREATMENT OF HÆMORRHOIDS.—Verneuil has obtained very satisfactory results in the treatment of hæmorrhoids by spraying the tumors with a spray of corbolic acid. This causes the congestion to disappear rapidly, and also relieves the pain in a very short period of time. The method is not always curative, but it will at least reduce the inflammation to such an extent that it will be possible to examine the parts carefully, and institute such other treatment as may be found necessary.

IODINE IN WINE.—A druggist, Barnouvin (*Bull. de Ther.*), speaks of the administration of pure iodine in wine. The sharp taste is thus disguised, this being said to be due to the tannin of the wine. Barnouvin, however, denies this, and says that he has removed the acid ferments from the wine as much as possible with gelatine and found that the tannin plays no especial part as regards the taste. He proposes to add to wine, freed from tannin, iodine in a proportion of 1 to 1000, whereby the styptic action of the acids is avoided.

AN EXPERIMENTOR ACQUITTED.—An exchange says that the Polish count who was brought into court for sequestering four children, and rearing them as animals, has been acquitted. It is reported that they had been confined each in a large well lighted and heated and ventilated room, well fed, and occasionally washed by a deaf mute; that they were unclad, never punished or restrained in any act; that two of the children have been confined thus three, one four, and one four and a half years. The defence of the count was that he was conducting a scientific experiment to learn what were the natural instincts and the intuitions really innate in the human species. The age of the children is not reported. They did not speak, and made barking, growling noises, and precipitated themselves upon their food like animals.

A PRECOCIOUS BABY.—Crivelli presented to the Paris Academy of Medicine the photographs of a girl, æt. 18 months, whose genitals were as well developed as those of a girl of 18 years. The mammæ and nipples were likewise well developed; the mons veneris was covered with hair, and the clitoris was very large. It was reported that the child was addicted to masturbation. The menses appeared regularly after the third month, and lasted from three to four days; for twenty-four hours just preceding their appearance the child seemed indisposed.

NEW JOURNALS.—With the advent of the new year, one is very safe in expecting to receive specimen copies of new candidates for journalistic honors. We note with pleasure the prospectuses of two journals, the first numbers of which will appear in January—*The Bacteriological World*, edited at Columbia, Mo., by our very able and honored State Veterinarian, Dr. Paul Paquin, the Director of the State Bacteriological Laboratory, and *The Prescription*, edited by Dr. W. C. Wile, of Danbury, Conn. Dr. Wile is already well and favorably known as the editor of the *New Eng. Med. Monthly*, and from his work on that journal we can safely anticipate a valuable addition to therapeutic literature in his new periodical.

THE MATTISON PRIZE.—"Opium Addiction as Related to Renal Disease."—With the object of advancing scientific study and settling a now mooted question, Dr. J. B. Mattison, of Brooklyn, offers a prize of $400 for the best paper on "Opium Addiction as Related to Renal Disease," based upon these queries:

Will the habitual use of opium, in any form, produce organic renal disease?

If so, what lesion is most likely?

What is the rationale?

The contest is to be open for two years from Dec. 1, 1890, to either sex, and any school or language.

The prize paper is to belong to the American Association for the Cure of Inebriety, and to be published in a New York medical journal, *Brooklyn Med. Journal* and *Journal of Inebriety*.

Other papers presented are to be published in some leading medical journal, as their authors may select.

All papers are to be in possession of the Chairman of Award Committee on, or before, January 1, 1893.

The Committee of Award will consist of Dr. Alfred L. Loomis, president N. Y. Academy of Medicine, Chairman; Drs. H. F. Formad, Philadelphia; Ezra H. Wilson, Brooklyn; Geo. F. Shrady, and Jos. H. Raymond, editor *Brooklyn Med. Jour.*

TANNIC ACID AN INTESTINAL ANTISEPTIC.—Professor Cantani has written, in the *Wiener medizinische Blaetter*,

of his therapeutical trials of tannic acid in intestinal diseases. (*N. Y. Med. Jour.*) He has found it, in ⅓, ½, or even 1% solutions, acting a useful part as an antiseptic, as it hinders the vegetative activity of the microbes and renders innocuous many of the poisonous ptomaines. In diarrhœa and dysentery, therefore, tannic acid becomes an important disinfectant as well as a stringent remedy. Mosler also reports that this drug is very beneficial in typhoid fever, particularly for removing the symptoms of meteorism and diarrhœa. Antiseptic solutions are best introduced by enteroclysis, the fluid thus administered having been proved, by the subsequent vomiting of some of it, to reach not only the whole length of the intestines, but even to the etomach.

LITERARY NOTES.

ANNALS OF SURGERY.

Amongst the interesting contents of the November number of this journal we note the originals, "On Fibrous Stricture of the Œsophagus," by Kendal Franks, M.D., "Case of Cholecystotomy for Gall Stones," by Francis J. Shepherd, M.D., and "Empyæma of Gall Bladder," by West Hughes, M.D.; the editorial, "Bergmann on the Surgical Treatment of Diseases of the Brain," and the reports on surgical progress—in general surgery, surgery of the nervous and vascular systems, head and neck, chest and abdomen, extremities, and genito-urinary organs.

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SOCIETY PROCEEDINGS.

SOUTHERN SURGICAL AND GYNÆCOLOGICAL ASSOCIATION.

Third Annual Meeting, held in Atlanta, Georgia, November 11, 12 and 13, 1890.

[CONCLUDED.]

SECOND DAY—AFTERNOON SESSION

DR. W. O. ROBERTS, of Louisville, read a paper on

REMOVAL OF STONE FROM FEMALE BLADDER THROUGH THE URETHRA, WITH CASES.

The paper was devoted simply to his individual experience in the extraction through the urethra of stone from the bladder of the female. The cases thus treated were six in number; the ages of the patients ranged from 15 to 56 years. Four were married, but only two had borne children. The stones were phospatic in four cases, uric acid in one, and an incrusted fringed body in another. In one, a very hysterical patient, the stone had for its nucleus a piece of soft wood. In one the patient had a vesico-vaginal fistula which had been closed by an operation some months prior to the occurrence of the symptoms of stone. In another the bladder had been opened by a surgeon in doing an ovariotomy upon the patient a year before the stone was discovered.

In four of the cases the stones were single, in one there were two, and in one nine. In this case the patient had passed at various times a number of small stones, from two to seven at a given micturition. These stones varied in size from that of a grain of wheat to a grain of coffee. In two years she had collected 184 stones, a number not representing all she had passed.

The extraction was done in every case under chloroform, the patient being profoundly anæsthetized. The urethral dilatation was begun with forceps, and completed by means of the fingers, the little finger being first introduced, the ring finger next, and finally the index finger. The fingers were well oiled. In Case I the stone was found to be almost an inch and a half in diameter. In Case II the stone was found in the urethra, and proved to be a piece of soft wood, heavily incrusted with urinary salts. In Case III the stone was spherical, and had a diameter of about one-half inch. In Case IV the stone was ovoid, its long diameter being an inch, the shorter three-fourths of an inch. In Case V there were nine stones, the smallest measuring circumambientially two and two and one-fourth inches; weight, eighty-four grains.

DR. WM. PERRIN NICOLSON, of Atlanta, Ga., presented a paper entitled

WET ANTISEPTIC DRESSINGS IN INJURIES OF THE HAND.

After dwelling upon the importance of the subject, both from the standpoint of the future earning capacity of the patient, and the large amount of financial compensation demanded from corporations, he stated that for seven or eight years past he had looked after the surgery of several railroads and manufacturing establishments, and in that time had been called upon to treat more than 300 hand injuries, representing all grades of injury, from slight contusion to complete destruction of the larger part of the hand. The especial point that was urged in the paper was the doctrine formulated by Verneuil—never to use a scalpel in a hand injury. The old teaching, that when a finger was crushed, you should go far enough behind the injury to secure a sound flap and amputate, was pernicious in the extreme, and had cost thousands of fingers that would have been restored to usefulness. Only such parts as were actually destroyed and pulpified should be removed, and all the tissue to come away could be amputated with the scissors. Projecting pieces of bone could be removed with plyers until reduced to the level of the fleshy parts. In compound fractures the parts should be coaptated as well as possible, and the line of separation be determined by nature, and under strict antiseptic dressings. Such a slough was harmless. Another point to which attention was forcibly called was the utilization of blood-clot in filling up ragged injuries, and by its substitution the restoration of lost parts. When a finger

was crushed off, the end should be trimmed with scissors, and the clot utilized in building up a tissue over the bone. In reference to dressings, Dr. Nicolson said that he had tried almost all varieties, and had finally obtained the most satisfactory results from keeping the parts constantly bathed in a non-poisonous antiseptic solution.

In dealing with these wounds they were first cleansed as well as possible, and then bathed in a sublimate solution. Over all wounds a piece of aseptic rubber tissue or oiled silk was placed, then iodoform and sublimate gauze, and finally over all a covering of rubber tissue, into which, at some convenient point, a small opening was made. The patient was then given a bottle of antiseptic solution, to be carried in his pocket if moving about, and instructed to pour, at frequent intervals, enough into this opening to saturate the dressings. He uses almost exclusively listerine, combined with a small amount of carbolic acid, in the proportion of half an ounce of the former and half a drachm of the latter in a six ounce mixture. If there was much pain, a small amount of aqueous extract of opium was added. These dressings were not disturbed until the third day, when they were removed under strict antisepsis, to preserve the integrity of the blood clot. Wet dressings were substituted at the end of about a week by the ordinary antseptic dressings, kept moist by external covering of rubber tissue. Should sloughing occur, it is kept wet for a longer time with the antiseptic. Under this treatment pain was reduced to a minimum. Suppuration never occurred, and the separation of sloughs was facilitated by the warm moisture.

Dr. J. T. Wilson, of Sherman, Texas, read a paper on

Uterine Moles and Their Treatment.

In the few cases that had come under his observation, they had been more troublesome and elicited more anxiety than most writers indicate they should, and the hæmorrhage in some of the cases were alarming; then, too, there were some points noticed in his cases which he had failed to find described in text-books.

All authorities seem agreed upon the etiological and pathological view generally taken of it, that it is a blighted or altered conception; the ovum having perished, its covering, or the placenta, if formed when this change takes place, becomes attached to and continues to receive nourishment through the uterine walls and remains or becomes an organized product until it is thrown off; and this condition is attributed by some to the vitality retained in the villi of the chorion.

He had never met with a case that was lying loose in the uterus, but all were more or less adherent to its walls and most of them to the posterior wall. They had to be taken away piecemeal and the surface well curetted, washed out and carbolic acid or Churchill's iodine applied to the surface. They all require after-treatment, because all except one case of hydatiform mole had endometritis and endocervicitis, two had severe cervical lacerations and erosions; most of them had a greater flow than usual at the subsequent menstrual periods until the inflammatory condition was relieved; in two cases the general health, while not robust, was fairly good, and others more or less delicate, none of them in perfect health; none had any history of a cancerous cachexia, nor of syphilitic taint; one was tuberculous. His experience had taught him to believe that if these cases do not receive treatment at a proper time there are two grave dangers to be apprehended, viz., hæmorrhage, which, if not an immediate cause of death, is capable of leading indirectly to that end, and septic poisoning.

In the treatment, if the cervix is sufficiently dilated and hæmorrhage troublesome,the mass should promptly be removed. If this cannot be done, a hot antiseptic vaginal douche should be given followed by a careful and efficient tampon, with the internal administration of ergot and anodynes if required, directing quiet, rest and simple diet. In from twelve to sixteen hours the tampon should be removed and the foreign body extracted as completely as practicable; this will require a good stout pair of forceps. He had used the ordinary dressing forceps, and placental forceps, for the purpose. An excellent instrument in some cases is Emmett's curette forceps. The surface should be well curetted with a wire curette, the uterus thoroughly washed out with a hot solution of bichloride of mercury and Squibb's crude carbolic acid or Churchill's tincture of iodine well applied to the surface. If much bleeding ensues—and this is not usual—the application of persulphate or perchloride of iron gives good results. The patient is put to bed and kept there as long as the indication in each special case may require; she is put upon a tonic treatment and hot vaginal antiseptic washes. In from three to five days the uterus may need curetting again and another intra-uterine douche; then the application of iodine about twice a week, alternated occasionally perhaps with carbolic acid as long as may seem necessary and the cure, if possible, completed, of any uterine disease that may exist. The patient's general health is carefully looked after and her mind tranquilized.

Third Day.—Morning Session.

Dr. G. Frank Lydston, of Chicago, read a very elaborate and lengthy paper entitled

A Review of the Treatment of Varicocele, With Cases.

He said, in discussing the various merits of operative procedures, it was unnecessary to take them up in detail. The *raison d'etre* of many specially devised and named operations is apparent only to the operator. For practical purposes the various methods may be divided into (1) Acupressure; (2) subcutaneous deligation; (3) open deligation; (4) deligation with resection of veins; (5) deligation with resection of scrotum; (6) resection of the scrotum.

The employment of acupressure to Dr. Lydston's

mind was an evidence of a lack of faith in modern antiseptics. It reminded him of the Dutchman's method of cutting off his dog's tail, an inch at a time, so that it would not hurt him so much. Gradual obliteration of veins had all the dangers of immediate deligation in a marked degree and had none of its advantages. The term acupressure covered practically all methods of gradual obliteration of the veins of which Davat's operation is an illustration. Subcutaneous deligation is not essentially dangerous in skilful hands. Simple as the operation appears, however, accidents have occurred. The operation is done in the dark and more tissue is included in the ligature than is necessary. Strangulation of tissue is not conducive of safety. Scrotal hæmatocele, phlebitis, septic infection, thrombosis and embolism are possible. The vas deferens has been included in the ligature. He does not condemn the subcutaneous operation in suitable cases, and in skillful hands, but he believes there are better and safer methods on the average. There is little choice between deligation without disturbance of the veins and deligation with resection of the veins, excepting the remotely greater danger of sepsis in the latter.

Gould's method of division by cautery he believes to be the most dangerous operation yet devised. The dangers of the open method are in a less degree those of subcutaneous deligation. If open deligation be determined upon the operation should be done as high up as possible in the straight portion of the veins and a single ligature applied to the vein. Deligation with resection of the scrotum he considers to be the ideal operation, in the majority of cases requiring surgical interference. His plan is as follows: An incision should be made parallel with the spermatic cord just below the external ring. This incision should be about one inch in length. The cord is hooked out with aneurism needle, the veins separated and tied, the ligature is cut through and the cord dropped. Sutures and antiseptic dressings complete the operation. The scrotum is now amputated by the improved Henry operation. Dr. Lydston uses decalcified bone drainage tube and juniperized silk ligatures and sutures. Resection of the scrotum he considers the simplest and safest operation for varicoceles of moderate size. In the more marked forms the affection invariably recurs to a greater or less extent. He does not, therefore, consider the so-called Henry operation a radical cure in the true sense of the word. The author reported a large number of cases operated upon by various methods with the results, and, as far as could be learned, the subsequent history of the patient. The author had noticed hydrocele as a result of subcutaneous deligation in two cases, one operated upon by himself, and the other by another surgeon. The doctor reported one very interesting case in which the scrotum was continually bathed in bloody perspiration, and in which the seminal ejaculations were heavily tinged with blood.

Dr. Willis F. Westmoreland, of Atlanta, followed with a paper on

Morbid Reflex Neuroses.

Dr. Geo. A. Baxter, of Chattanooga, read a paper on

Silicate of Soda, Some New Methods of Use in Surgery,

in which he said the jacket of baked silicate of soda which he would present to the Association possessed all the qualtities to be found in the plaster, firmness and support, and weighs actually one pound and six ounces. It is neater in appearance and finish, can be perforated like leather for ventilation which plaster cannot. It is even lighter than leather without its costly process of construction, and has the same advantage over the woven-wire jacket with the additional advantage over both these latter and all others of this class, that it can be constructed by any surgeon at any time or in any place. Dr. Baxter suspends his patient and puts roughly a plaster jacket around her, and cuts this as soon as it has hardened enough to retain its shape, thereby lessening materially the time of suspension, the most trying ordeal with this or the plaster and not without its dangers when long continued, bind the cut edges together where it has been cut down directly in front, with cords, and then place a core of paper in the center. This paper core is used for two reasons (1) to lighten the cast and take as little plaster as possible, and (2) to dry it the more readily by heating the inside. This done, the plaster is poured around the core and inside the cast, which gives him a mould of the body in extension and counter-extension, exact in every respect. Around this is made the silicate jacket after the manner of the plaster roller bandage, weaving one-half inch metal strips in the meshes of the bandage at a distance of four inches apart around the cast, an inside lining of a knit shirt having been first placed over the cast. The whole is then placed over a coal oil stove and allowed to dry out, which it does in from one-half to two hours or less, especially if the cast has been previously dried. This process of heating not only dries the silicate but bakes it as well, and renders it impervious to the action of water or the perspiration, and gives it sufficient strength to allow of it being perforated for ventilation. It is now cut from the mould with a straight incision down the center, two pieces of leather, to which button hooks or eyelets have been previously attached, sewed up and down the front on each side, then the whole can be laced up solid or loosened and taken off at will. The necessity of taking off a jacket or leaving it on during the whole course of treatment will, of course, depend upon the character of the disease or injury under treatment.

Dr. Edwin Ricketts, of Cincinnati, Ohio, contributed a paper entitled

Surgery of the Gall Bladder,

in which he said to Langenbach was due to the credit of totally extirpating the gall bladder, and to J. Marion

Sims we owe a debt of gratitude for establishing the operation of cholecystotomy.

Dr. Ricketts reported seven cases of gall stones.

Case I. Mrs. ——, æt. 38, married, consulted him in 1880 for a tumor in her right side in the region of the gall bladder. Said she had passed by the bowel following a severe attack of hepatic colic a number of gall stones. She was emaciated and suffered from what she claimed was neuralgia of the stomach. She was slightly jaundiced and bowels constipated. Upon examination of the abdomen the tumor was well marked and nodulated, above which was the liver surface smooth. He made the diagnosis of gall stone, and urged an operation. The patient's physician, however, urged the expectant plan of treatment, which was accepted by the patient. She then went to the country and in less than three months had an attack of hepatic colic, followed by peritonitis, dying inside of three days.

Case III. Ellen ——, colored, æt. 30, consulted him for a markedly distended gall bladder which made its appearance after a hard day's work over the wash-tub. She had been sick for ten days with fever, temperature reaching 103°, rapid pulse, clayish stools, with occasional attacks of hepatic colic, though not severe. He opened the gall bladder, turning out one pint of fluid which consisted of bile, mucus and pus, stitching the gall bladder up against the peritoneum. After three days catarrhal plugs were washed out of the common duct through the abdominal incision in which had been deposited a glass drainage tube. The fistulous tract is still open, discharging periodically, but with no bad results to the patient.

Case IV. A diagnosis of cancer of the liver was made by the attending physician. The gall bladder was opened and the stone turned out weighed 128 grains, and the common duct was filled with catarrhal deposits.

Case V. After incising the gall bladder there escaped first about one drachm of pus, after which Dr. Ricketts turned out 23 stones. A diagnosis of cancer of the liver in the base was made by the attending physicians.

Dr. Hunter P. Cooper, of atlanta, Ga., reported a case of

Fracture of the Femur Due to Fragility.

Dr. Geo. H. Noble, of Atlanta, followed with an illustrative paper on

Procidentia Uteri.

Afternoon Session.

Dr. W. Hampton Caldwell, of Lexington, Ken., read a paper on

Rectal Medication,

in which he said that several years ago he was convinced of the utility and safety of rectal administration of medicine, and had ever since regarded it as a most important plan of treatment. Since we accept the theory of the local origin or manifestation of the majority of diseases, this idea of rectal administration of medicine, was more easily accepted as scientific in its applications than at any time heretofore. The rectal suppository, consisting of coco butter, incorporated with the various therapeutical agents affords the most efficient and pleasant mode of administration in our possession. Rectal suppositories satisfy all requirements as a local or constitutional remedy; they are neat, convenient, and in almost every instance preferred by the patient to the administration of the same drug by the mouth. In the administration of anodynes, it is certainly a superior method of administration to all others, as the sensitive stomach is no longer a barrier or excuse in the administration of even the most disagreeable medical agent, for we well know in many instances that this organ is either tolerant to opiates or the patient has an invincible objection to taking them, the impossibilities of the rectal administration being thrown off is one great advantage over all other methods of administration. The effects of rectal medication embrace a wide range of action, including anodyne, antiseptic, alterant and astringent. In severe pain they certainly afford the best and safest source by which our patient's suffering can be relieved, as the action upon the rectal surface of a diffusible anodyne is quite rapid, and produces an effect about as soon as when administered by the stomach. In all inflammatory or painful affections of the abdominal or pelvic organs, this plan of administration has succeeded better than all other with the author.

Dr. Thad. A. Reamy, of Cincinnati, Ohio, reported a case in which he removed a stone weighing 365 grains, by vaginal cystotomy, from the bladder of a child 6 years of age, with injury of the ureter. Operations done for closing the bladder were difficult, but ultimately successful. He exhibited the stone, and made some comments on the case.

He felt after the stone was removed that it would have been better to have made supra-pubic cystotomy. Had he known the size of the stone, he would have probably done that operation. But in view of the fact that it was partly encysted, that the bladder walls were much inflamed and thickened; also the fact that in the child the peritoneum dips much lower down in front of the bladder than in the adult, it became a serious question whether this course would have been better than the one pursued.

It was not clear whether the ureter was damaged in the removal of the stone.or was exposed by the sloughing which occurred much latter on. He was inclined to favor the former view; and that the discharge of urine into the tissues of the bladder will, in the line of suture, was to no small degree responsible for some of the failures in closing the bladder. However, until the last operation the most critical examination failed to discover the ureter.

Though Parvin, Campbell and others had turned an exposed ureter into the bladder, the speaker was not aware that it had heretofore been done in a subject so young. The vagina being so small rendered the manipulation difficult in the extreme.

Dr. James A. Goggans, of Alexandria City, Ala., read a paper on

The Surgical Treatment of Empyema.

He said during the last 18 months he had treated six cases of empyema which developed in the wake of pneumonia, all of which had made perfect recoveries. These patients varied in age from 3 to 35 years.

Surgical treatment was the one which had been the most successfully employed. Spontaneous cures he said were rare—so rare that surgical interference was the rule. There were many methods of operating for the removal of pus from the pleural cavity, but they may be classified under two general headings:

1. The closed method, which consists in removing the pus by simple puncture with some kind of trocar or modern aspirator and allowing the puncture to heal at once.

2. The open method, which consists in making an incision more or less free with the introduction of some kind of drainage tubes to maintain the perfect evacuation of the fluid, and admit of medicated washings, and to promote free ingress and egress of air that has been passed through an antiseptic dressing. The surgical treatment then being an absolute necessity, we cannot over-estimate the importance of making the diagnosis certain by resorting to exploratory puncture with the hypodermic syringe. We can assure the patient and friends that no evil results can come from this procedure, and that the prognosis positively depends upon this means of settling the diagnosis.

SELECTIONS.

THE KIND OF ELECTRICITY TO USE AS A THERAPEUTIC AGENT, AND HOW TO USE IT.

BY MORTON PRINCE, M.D., BOSTON, MASS.

Extract from a paper in Boston Medical and Surgical Journal.

When our intention is principally to stimulate the muscles, to give them tone and exercise, and prevent atrophy, the preference is to be given to faradism. In the different forms of hysteria faradism usually works better than galvanism. If, however, as a result of degeneration of the nerves, the muscles fail to respond to faradism, as is often the case, galvanism must be used. When we wish to relieve pain and hasten absorption(?) of inflammatory products, when we hope to produce a direct effect on the nutrition of nerve and muscle, galvanism should be selected. When pain alone is the offending symptom, either galvanism or franklinism. Although faradism has its advocates in neuralgia and muscular rheumatism, static electricity is a most powerful factor. Sometimes it is well to combine two or more kinds, especially galvanism and faradism. Sometimes, especially when the diagnosis is uncertain, we can only determine by trial which will be most beneficial.

I have frequently seen failure follow the use of electricity owing to insufficient apparatus. When a battery of low electro-motive force is used, if the resistance of the external circuit (the skin and electrodes) happens to be large, so feeble a current may pass as to be inoperative. Unless a good galvanometer is in the circuit, this fact will escape observation. The physician should have at his command a galvanic battery capable of giving 25 milliamperes of current and maintaining that current under the severest conditions of resistance.

The electrodes should be of varying sizes from 6 by 3 inches to ⅛ inch diameter, according to the effect to be produced. In connection with the subject of electro-diagnosis I spoke of this necessity of having proper apparatus. For this latter purpose a battery of high electro-motive force is particularly indispensable. It is very difficult to make a proper electrical examination of muscles and nerves without having a current which is unaffected by variations in the resistance of skin and electrodes which ordinarily occur during the course of an electrical examination.

The next point is the proper application of the electricity. The electrodes must not be applied haphazard, but in definite predetermined ways, according to the effect desired. If the intention is to stimulate the muscles, the motor points should be carefully selected, and one electrode applied over them. If the nerves are to be stimulated, the electrode should be placed over their course and the current frequently made and broken. When pain is to be combated it is generally best not to interrupt the constant current, but to let it flow steadily through the painful parts. Sometimes pain can be best alleviated by strong faradism applied with a wire brush. This method is strongly recommended by some writers for facial neuralgia and acute rheumatism. It is also the best means of stimulating the sensory nerves, as in some forms of anæsthesia.

When only a general tonic effect of galvanism or faradism is required, it is sufficient to paint, so to speak, all the muscles and nerves of the body with the electrodes, which should be large, making the muscles contract if possible. Passing the electrodes up and down the spine is very useful for this purpose. Sometimes as a result of nerve-degeneration, the nerves and muscles will not respond to faradism. Galvanism must then be used. As a general tonic, static electricty is often to be preferred to either.

In conclusion, I would say if you wish to obtain success in using electricity never put the battery into the hands of the patient to use himself; never entrust it to a nurse; never employ a student if you can help it. Always apply it yourself.

Before closing, I would say a few words regarding electrolysis. I cannot say anything regarding this treatment of uterine tumors, pelvic inflammations and other gynæcological affections about which we have

heard so much during the past few years, as I have had no experience with them.

I can, however, strongly recommend electrolysis for many affections.

Hair can be removed from the face without injuring the skin or leaving any blemish behind. As satisfactory as this operation is, I cannot believe that its possibilities are as well known as one would suppose would be the case, judging from the instances of this affection one observes in the streets.

Vascular tumors of the skin, such as cavernous angiomata and nævi can be removed as well as warts and other facial blemishes.

Port wine stains can be greatly improved. I have for a long time been experimenting with the treatment of this deformity, and I hope soon to be able to report a greatly improved method of using electrolysis.

The dilated veins which often in advancing years deform the face, particularly that prominent feature, the nose, are easily and satisfactorily cured.

Goitre is one of those new growths which it is claimed, can be cured by electrolysis. The best method is to insert the needles from both the poles into the gland, and to pass through them a powerful current of from 40 to 80 milliamperes. The needles should be insulated where they pass through the skin, and moved about in different directions. The whole process should include several sittings of 20 to 30 minutes each. Dr. John Duncan reports having treated 14 cases by this method. Three were under treatment at the time of the report. Four had been lost sight of. Of the remaining 7, 6 were absolutely cured. The seventh case was not changed by one operation. The treatment is one well worth trying.

For vascular tumors just referred to, such as nævi and cavernous angiomata, it is by far the best method of cure that we have, particularly where it is desirable to avoid disfiguring scars. The scar left by electrolysis is white and does not contract. The operation is bloodless, safe and free from after-pain. The only drawback is that it may require several sittings to obtain the best results.

EPIDEMIC HYSTERICAL ECSTASY.

An interesting account of an epidemic of hysterical religious ecstasy is reported by J. W. Hjelman, in the *Finska Lakare Sallskap Handl.*, as quoted in the *Wiener Med. Presse*, June 15, 1890. The epidemic occurred in the northeastern part of Finland, and began at a dance, a girl æt. 16 years, being the first subject. During the course of the entertainment the patient was suddenly seized with violent convulsions. A few days later a second girl, who was taking the place of the first, was also seized with simular convulsions; and in a very short time 20 or 30 persons, mostly young women, were similarly affected. During the first part of the epidemic, the symptoms were merely those of convulsions, but later, after recovering from the convulsions, some of the patients began to preach, and the populace came from far and near to hear these—as they thought—inspired sermons. Many of the listeners had their initial convulsion during these meetings. The attacks were of a hysterical nature. In a few cases there was anæsthesia; but in the milder cases the convulsions were absent and were replaced by hysterical hiccough. In all there occurred about 50 cases, and the subjects included 5 men.

With the approach of winter the epidemic gradually died out, after having lasted for half a year. Hjelman concludes by drawing attention to the fact that the province in which the epidemic existed, is almost shut off from intercourse with the outside world, and that the people's intellectual development is unusually low. A similar ecstatic religious movement had occurred in the province 50 years ago.

The study of epidemics of hysterical ecstasy takes one naturally back to the time of Mesmer, and his seances. His patients, seated around a tub of water supposed to be magnetized, would gradually become more and more excited until they were seized with violent convulsions and were conveyed to padded rooms; there to "fight it out" with their supposed or real disease. The condition thus produced was undoubtedly one of hysterical ecstasy. Similar seances were held in various parts of France, largely attended and fruitful of the same hysterical exhibitions.

In Arabia, among the Mohammedans, and in India, among the Fakirs, religious festivals are attended by similar epidemics even at the present day. An eye-witness describes such a scene as follows: It occurred at a religious festival of the Mohammedens. A "son of the Prophet" was present, in his huge green turban and had promised to heal the sick and perform other miracles. The descendant of Mohammed sat on a canopied dais at one end of the enclosure, and in a circle around him, squatted a large number of men with tom-toms and horns. Presently a weird chant was started, accompanied by beating of the tom-toms, which gradually increased in volume and energy, the "believers" evidently growing more and more excited. Presently a man, bared to the waist, stepped into the centre of the enclosure; lifted above his head, by point and hilt, a sword with an edge as keen as a razor's, and crying: "There is no god but Allah, and Mohammed is His Prophet!" brought the sword violently down against his abdomen, and then fell flat on his back. The son of the Prophet then stepped from the dais and, steadied by two servants, stood upon the blade, over the man's abdomen, muttering some prayers in the meanwhile. He then returned to the dais, and the man lifted the blade from his abdomen. There was no cut!

This clever trick had a marvelous effect upon the chanting crowd. Several sprang up, and seizing axes or knives, proceeded to mutilate themselves in the most horrible manner. Others leaped, shouted and finally fell in violent convulsions, frothing at the mouth and

struggling violently. The performance continued for several hours. At its close the mutilated men were carried to the Prophet, who touched their wounds and offered a prayer, No "healing" was visible. Those in convulsions and others unconscious were also carried away. These festivals last for days, often weeks, and their effects still longer.

Coming to our own country, we see similar hysterical manifestations, although of much milder type, occurring during religious revivals. While, happily, these do not become epidemic, yet cases of hysterical ecstasy, taking the shape of trances or convulsions, are frequently the outcome of emotional religious movements.

A study of hysterical ecstasy shows that it is a pathological condition, and if encouraged to any degree would result in serious injury to to the subject of it. The arousing of such conditions, whether at revivals or mesmeric seances, should therefore be vigorously discountenanced by the profession.—*Med. and Surg. Rep.*

THE INFANT'S FOOD DURING THE FIRST YEAR.

BY OLIVER P. REX, M.D.,

Lecturer on Pediatrics in the Jefferson Medical College.

Extract from report of a Clinical Lecture Arch. of Pediat., Oct, 1890).

The nursing bottle should be as simple as possible in construction, with a black rubber nipple. After every nursing the bottle should be scalded out with a solution of bicarbonate of soda or sal soda, and the nipple should be everted over the thumb and scrubbed with a brush wet with the same solution. In the intervals between nursing the nipple should be kept in a solution of bicarbonate of soda or salicylate of soda.

Speaking broadly, the whole medical treatment of the first year of infancy comes down to a question of proper feeding. How few diseases come naturally to the infant in its first year! It leads almost a charmed life, provided its feeding be properly carried out.

The constant presence of food in the stomach causes a constant activity of its glandular structure. Increased vascularity means increased secretion, and thus is produced a catarrhal condition. Rational treatment must commence at the starting-point of the disease. Let us begin with the blandest and most acceptable food to the stomach,—albumen water. Take one pint of boiling water and cool it until tepid. Into this stir by degrees the white of one egg. Be careful to add a very little white at a time, stirring constantly until the whole has been dissolved in the water. This makes a mucilaginous mixture, which may be flavored with a pinch of salt, or sugar, or, as is preferred in the Paris hospitals, with orange-flower water. A teaspoonful to a tablespoonful of this drink given every five, ten, or fifteen minutes will quickly stop vomiting, and now the diet can be supplemented by the addition of barley-water. Take one to two tablespoonfuls of thoroughly-washed pearled barley, put in a pint of water, and keep at boiling-point for an hour. This gives a gelatinous liquid, to which the white of an egg may be added as before, with a teaspoonful of brandy, a pinch of salt, and a little sugar. At this stage the diet may be varied by using rice-water or equal parts of barley-water and lamb broth. From this rather restricted diet we can soon proceed to the use of sterilized milk. If the child is constipated, Mellin's food may be employed with advantage, while a tendency to looseness can be best controlled by the peptogenic milk powder. Thus step by step, without the use of any medicine at all, the child's digestion can be brought back to a natural condition.

ARISTOL IN VENEREAL DISEASE.

V. Fisichella reports (*Riforma Medica*, 1890) eight cases of venereal diseases in which aristol was tried by Professor P. Ferrari, Director of the R. Instituto Dermo Sifilopatico of Catania. The drug was used in form of powder, which was sprinkled over sores, etc.; no internal treatment was employed.

In the first case (a youth, æt. 19 years, with syphilitic ulcers at the sides of the frænum, induration behind the glans, paraphimosis, and enlarged glands in each groin) there was some improvement in the ulcers in three days, and in a fortnight they were healed; the induration, however did not disappear till the twenty-third day.

In the second case (a man, æt. 24 years, with a syphilitic ulcer of the meatus, which showed a decided tendency to become phagedænic) aristol was applied twice a day, but after a fortnight it had to be stopped, as, so far from proving beneficial, it seemed to increase the tendency of the ulcer to spread.

In the third case (a lad, æt. 19 years, with an ulcerating bubo in the left groin) the patient insisted on leaving the hospital before the treatment was concluded. On the eighth day the ulcer had assumed a healthier aspect, and on the eleventh (the day the patient left) it was almost healed.

In the fourth case (a man, æt. 21 years, with seventeen ulcers in the balano-preputial sulcus and on the mucous surface of the prepuce, paraphimosis, œdematous infiltration of the penis, etc.), aristol did good, but was very slow in its action, though it was applied thrice daily.

In the fifth case (a woman, æt. 30 years, with diffuse erythematous syphilides of the skin, and papules about the anus and vulva), aristol proved utterly useless.

In the sixth case (a woman, æt. 38 years, with an enormous ulcer in the left hip, originating in the breaking down of a gumma), aristol had again to be abandoned as useless.

In the seventh case (a woman, æt. 23 years, with a primary sore of the fourchette) a cure was affected in twenty-four days.

In the eighth case (a man, æt. 21 years, with a hard chancre), the ulcer was healed in twenty-five days.

Fisichella concludes that aristol has a certain effect in venereal ulcers, but it acts very slowly. Its only advantages over iodoform is that it has no smell, but it is inferior to the latter in therapeutic activity. Aristol, in short, "is certainly not destined to be registered in the pharmacopœia as a useful remedy in syphilitic affections."

Virchow at the Institute.—Calling on him at his rooms at the Pathological Institute, one has to wait one's turn behind a screen which hides the Professor from the eye of the interviewer. This gives one a chance of examining his sanctum, which, to an outsider, appears to be a perfect chaos. Beside his desk, which is covered with papers of every description, we notice a small tray with his scant luncheon, consisting of a small bottle of beer and two sandwiches; he is a most frugal man while at work. The greater part of his room is occupied by a large number of skeletons and skulls, the floor being simply covered with the latter, through which one has almost to wade to the small table on which stand his microscopes and histological instruments. We find here two very old Hartnacks, one furnished with a low and the other with a high power. These are the only microscopes he uses, and lovely lenses these old glasses encased in rusty frames are. Besides we notice a glass of water, a few glass rods, needles, scissors and a common razor, and his five bottles of acetic acid, sulphuric acid, iodine solution, salt solution, and caustic potash. For he examines almost every thing unstained and fresh, and is extremely skilful in cutting sections with his razor. He uses no microtome, and at most a piece of amyloid liver into which he squeezes a small piece of tissue, in this way embedding it, if it be too small to cut it with the free hand. He despises even the double knife, and boasts of being able to make a section through the pons as good as any collodion specimen. On another table we notice a beautiful modern microscope (Seibert) with all the newest improvements, oil-immersion, etc.; but this is under a glass case and serves simply for show, being never used by the Professor. When showing him a histological specimen, it has to be taken to one of the Hartnacks and be described to him. After examining it carefully, he at most may express his pleasure of seeing everything that has been described. He prefers to see an unstained specimen, except in cases of epithelial tumors, for which he allows staining. In his dealings with men as a colleague or teacher, he is exceedingly fair, showing always his zeal for truth and unbiased justice. At the same time he is very jealous of his own personal rights, but without any boast or pomp, being careful not to infringe on the rights of others. As he himself says, "the right of experience he places over and above any other right; and the conviction that observation on correctly formed questions in each case must give an answer has never tempted him to try the answer before the observation." The best characteristic of his great mind as a man may be formed in a few words quoted from his preface of the "Cellular Pathology": "I insist on my right, and, therefore, I also acknowledge the right of others. This is my maxim in life, in politics, in science."—*Brit. Med. Jour.*

Effects of Lightning Stroke.—Mr. Philip James (*Australasian Med. Gaz.*, August, 1890) related this case. The patient, a man, æt. 43 years, had been in his hut on December 14, 1889, during a violent thunderstorm, and was discovered by his friends speechless and in a state of partial unconsciousness 18 hours afterwards. On examination the hair and whiskers on the right side of his head and face were scorched, and there was an erythematous blush on the right cheek and right side of his nose, and a thin red line to the right of the sternum and extending down to the pubes; the skin along this line afterwards desquamated. The hair of both legs was singed, and on the outer aspects of both heels the skin was burnt. His mind was clear, but he had no recollection of what had occurred, his speech was almost unintelligible, and he was much troubled by a copious secretion of viscid tenacious mucus in the mouth, which he experienced great difficulty in expelling. The plantar reflexes were active, the cremasteric and abdominal normal, as also were the knee-jerks; there was no clonus. There was no loss of muscular power in the arms, the tongue was protruded straight, he complained of much pain in the throat, and the act of deglutition was much impaired, fluids regurgitating freely through the nostrils. He was unable to pass water, but had some control over the anal sphincter. His legs showed no loss of power, but he had lost coordination and was unable to maintain his equilibrium. His pulse was 44, respirations 11 to 12, temperature normal. The pupils were natural, but he said the light hurt him, and some days later the left lid drooped a little and he said he saw double. Hearing, taste, and smell were natural. His improvement was uniform but slow; catheterism was necessary for some weeks, and in May he still had a jerky but not ataxic gait. His memory was defective and his conversation fatuous.—*Br. Med. Jour.*

Preventive Inoculation.—Frank S. Billings (*Times and Reg.*, August 30, 1890) gives an account of the theory and practice of protective inoculation and vaccination, together with some of his own results. He is a disbeliever in the efficacy of Pasteur's antirabic treatment. He claims to have proved by his experiments that (1) a mitigated or non-fatal degree of virulence can be found in natural outbreaks; (2) this or any other degree of virulence can be retained indefinitely by his method of artificial cultivation; (3) the micro-organisms can be "fed up and down in virulence" by changes in nutrition alone; (4) a direct proportional relation can be

established between a certain dose of virus of known virulence in small animals, and a safe and preventive dose of the same virus in hogs. He appears to have obtained a variety of the swine-plague microbe which is non-virulent, but capable of creating immunity in pigs when injected even in single doses of 1 cubic centimetre. Of the method by which this result has been achieved the only explanation given is that the germ loses its virulence when cultivated in sterilized cattle urine.

It is Different Here.—The rumors concerning the precipitate departure of Dr. Lassar, the whilom secretary of the Berlin Medical Congress, appear to repose upon a substratum of fact. It is authoritatively asserted when Dr. Lassar received the official intimation of the intention of the Empress to visit the exhibition annexed to the Congress, he hurriedly gave orders that his own exhibit—containing sundry venereal specimens of an uninviting aspect—should be screened off out of deference to the sex of his august visitor. As ill-luck would have it, the Empress, in the course of her listless promenade, spotted this particular exhibit, and with the curiosity which is the dominant feature of the daughter of Eve, peasant and empress alike, she insisted upon its being uncovered. Dr. Lassar, taken and nonplussed, stammered out that the objects were not fit subjects for a female, even if empress, to look at —an observation which excited the lady's anger to such a pitch that the unlucky secretary promptly received an invitation to make himself scarce, an injunction which, in an autocrat monarchy, is not to be treated with contempt.—*Hospital Gazette.*

Bilious Attacks.—Outis writes as follows in the *Lancet*: In a case of migraine similar to that detailed by "A Ten Years' Subscriber," the following prescription gave prompt relief, and might, I think, be tried with advantage:

℞ Pot. brom., - - - - - ʒ ij.
Antipyrin, - - - - ʒ iss.
Liq. bismuth. et am.cit., - - ℥ j.
Tr. card. co., - - - - ℥ ss.
Aq. ad. - - - - - ℥ viij.

Two tablespoonfuls when the attack comes on, to be repeated every two hours till relief is obtained.

Low Railroad Rates for the Holidays.—The Missouri Pacific Railway greets all its friends with a wish for the Merriest Christmas and the Happiest New Year, and takes pleasure in offering greatly reduced round trip rates to enable them to visit their friends at any point on this road, not over 200 miles distance. Tickets are on sale December 24, 25 and 31, and January 1, good to return until January 10. For tickets and all further information, apply to your local ticket agent.

USEFUL FORMULÆ.

The following formulæ are taken from *The Times and Register:*

Caustic for Nævi, Tubercular Growths, etc.—

℞ Sodii ethylati, - - - - - ʒj.
Alcohol, - - - - - - - ℥j.

M. S.: Apply with care.—Richardson.

For Eczema and all Squamous and Vesicular Eruptions.—

℞ Plumbi oxid. vel carb., - - gr. xx.
Hydrargyri oxid. rub., - - gr. x.
Ol. palmæ purif.,
Adipis benzoati, - - - aa ℥ss.
Creasoti, - - - - - - ♏vj.—M.
—Startin.

Ferruginous Pills.—

℞ Ext. cinchonæ,
Ext. gentianæ,
Ext. rhei,
Ferri et potassæ tart., - aa gr. lxxv.
Ext. nucis vomicæ, - - gr. vijss.
Ol. anisi, - - - - - - gtt.v.
Glycerini, - - - - - - q. s.

M.—et in pil. No. c, divide.

S.: Two pills before each meal.—Huchard, in *Le Bul. Med.*

Mixture for Fetid Exhalation from the Mouth.

℞ Bicarb. of soda,
Saccharine, - - - - - aa ʒj.
Salicylic acid, - - - - - ʒj.
Proof spirit, - - - - - ℥vj.

A teaspoonful in a glass of water to rinse the mouth. —*Medical Press.*

Ointment for Fissures and Eczema of the Nares.

℞ White precipitate,
Boric acid, - - - - - aa ʒj.
Acetate of lead, - - - - - grs.v.
Oxide of zinc, - - - - - ʒj.
Vaseline, - - - - - - ℥j.

F. S. A.—*Medical Press.*

For Hay Fever.—

℞ Zinci valerianat, - - - - gr.j.
Pil. asafœtidæ comp., - - - gr.ij.

M. S.: One or two pills to be taken two or three times daily. (For neurasthenia.)—Sir Morell Mackenzie.

℞ Acid chromici cryst., - gr. $/_{16}$–$^1/_4$.
Aquæ destillat., . - - - - ℥j.

M. S.: To be sprayed into the nose (diluted with equal quantity of boiling water) for two or three minutes, several times daily. (For paroxysmal sneezing and rhinorrhœa.)—Macdonald.

℞ Glycerini acid. carbolici, - - ℥j.
Quininæ hydrochlor., - - - ʒj.

M. S.: Dissolve by heat, and add $^1/_{2000}$ part of bichloride mercury. Apply cautiously to nasal mucosa every two to three days.—Sir Andrew Clark.

ORIGINAL ARTICLES.

THE PATHOLOGY OF DIPHTHERIA.

BY JOSEPH EICHBERG, M.D., CINCINNATI.

Read before the Southwestern Ohio Medical Society.

GENTLEMEN: Your Committee on Programme has kindly extended to me an invitation to address you on the above subject. Sensible, as I am, of the compliment which this implies, it is with some little hesitancy that I have undertaken the task, in view of the difficulties and doubts, which still, in a measure, surround the subject. It would seem that the portion of the subject assigned to me is, perhaps, the most important of all, in consideration of its bearings on the prevention, treatment and cure. While it belongs to the domain of etiology to acquaint you with the known facts as to causation, while it shall be another's province to bring out in clear relief the symptoms, and to still others shall be given the important task of showing how best these may be met, the first and salient question in the pathology of this affection brings us to consider "What is diphtheria?" The other points in the discussion deal with outward and tangible signs; this one question alone leads us to the very essence of the subject.

Upon the answer will depend the entire course of the treatment. Is diphtheria primarily a local or general disease? Is there, properly speaking, infection before the outbreak of any local changes, or are the general symptoms secondary to and dependent upon the manifest deposits upon mucous membrane? Is diphtheria an ordinary inflammation of mucous membrane with special characteristics, or must we regard the inflammation merely as the sign of nature's battle against a foreign and deadly parasite? Must we have, as in certain other parasitic diseases, notably tuberculosis, a peculiar condition of the system, a vulnerability or predisposition, or is the parasite of such virulence that even the condition of perfect health can offer no obstacle to its invasion? What effect has this poison when introduced upon the entire economy? What upon special organs? What, in other words, is the pathology of diphtheria? How shall we explain the series of symptoms by the anatomical changes? The range of the subject is most extensive; not equally so our positive knowledge.

Proceeding, firstly, to the consideration of the essential nature of diphtheria, we are confronted with some difficulties, which, even in the past, have obscured the subject, and tended to confuse the clear conception that should obtain regarding it. Diphtheria is a distinct and isolated, well-defined morbid process, peculiar in its nature, constant in its character through many centuries, occurring as an infectious disease, readily communicable by contact, and sometimes shows itself as an epidemic. It is as clearly and markedly as independent a morbid process as measles, scarlatina or typhoid fever.

The difficulties in the way of its recognition as a pathological entity are largely due to the substitution of one of its most common symptoms for the entire disease; and to the basing of diagnosis altogether on a merely incidental feature, namely, the exudation in the pharynx. It would be just as proper to say that there could be no case of acquired syphilis without a sore on the genitalia, and that every sore in that locality was a sign of syphilis, as to affirm that there could be no pharyngeal exudation without diphtheria, or that every deposit in the fauces was a pathognomonic sign of diphtheria. The difficulties that would arise from such a doctrine as to syphilis are manifest; and yet this reasoning has, unfortunately, been allowed to control our views with reference to diphtheria.

The clearness of our view has been further impaired by the fact that this dssease has many complications and sequelæ, which, in their turn, modify and react upon the original condition, and thus are often responsible for a faulty diagnosis. The intensity of the poison is often such that the patient is rendered prone at once. Again, each of the complications assists in sapping his strength to such a degree as to diminish, if not wholly to destroy, his powers of resistance; or the complication may be directly responsible for the fatal issue at a time when the unsuspecting patient is felicitating himself on the satisfactory recovery from the prime cause of his trouble.

If we examine the evidence that points to the independent nature of diphtheria, we have, firstly, from a clinical standpoint the following facts: The disease manifests itself under all conditions of temperature, in all regions of the globe. Neither mountain nor valley, neither winter cold nor summer heat, high or low degree of latitude, offer any immunity. The princely palace and the hovel of the serf are invaded with indiscriminating impartiality; and all ordinary hygienic influences are powerless in the face of this dread destroyer; indeed, at times, it would almost seem that cleanly homes and good surroundings invite the evil. Nor is it attached in any way to telluric influences, since epidemics have been reported, on good authority, as originating on ship-board, long after the vessel had been out of sight of land. Racial distinction avails naught in the face of this specific poison. Caucasian, Malay and Ethiopian are alike vulnerable, and yield, respectively, about the same percentage of mortality.

So firm an abiding place has the disease now found in all civilized communities that we may speak of it as pandemic, with occasional local increased intensity. There is scarcely any country that is the scene of traffic that has not been affected with one or more severe visitations; and no larger city that issues weekly reports of mortality can point to a clear column from this affection for any considerable period. No age is exempt, and the two sexes suffer in equal ratio; social position is without influence on course or susceptibility. There

is not, so far as can be ascertained, any protection conferred by a previous attack; nor does one attack render the patient more liable when subsequently exposed. Heredity plays no part in the liability to its occurrence; there is no special diathesis that hastens its spread; indeed, it would at times appear that the most robust prove the easiest victims.

That it is essentially an infectious disease is shown by the frequency with which a number of widely separated foci develop simultaneously in a circumscribed community; and that it is contagious, in high degree, has been so abundantly and repeatedly verified as scarcely to require further mention. An illustration occurred lately in my service at the Cincinnati Hospital that bears directly upon this point. A child was admitted, suffering from a severe attack of diphtheria, was placed in an isolated room, soon developed symptoms of laryngeal obstruction, and died in a very short time, notwithstanding the prompt performance of tracheotomy. A nurse, one of the pupils of the training school, had been assigned for day service, another for night service at the bedside of this one patient. Both nurses fell ill with diphtheria, and, fortunately, both recovered; yet, as showing a characteristic commonly met with in nearly all infectious diseases, though the exposure occurred at the same time, an interval of five days elapsed between the first appearance of the symptoms in the two respective cases.

The specific nature of the disease, its right to be considered a morbid process *per se* is attested more by these traits of contagiousness and infection, and by certain of its sequelæ, than by the seat or character of the local process. A diphtheritic deposit is not necessarily a sign of diphtheria, and it would be well if we were to use this adjective in the sense indicated by Loeffler, to describe a distinct pathological alteration in the anatomy of the tissues, also met with in other conditions, rather than to imply by it a necessary connection with diphtheria.

The term diphtheritic, in its derivative sense, means merely membranous, and may, therefore, be justly applied to all inflammatory membranous deposits. This course is justified in that other causes than the poison of diphtheria can result in such an inflammatory product. Bretonneau himself, who gave us the early classical description of diphtheria, and assigned to it this name, recognized that a membranous inflammation might result from contact with certain irritating foreign substances, such as tincture of cantharides dissolved in olive oil injected into the larynx and trachea. Later experiments with ammonia, sulphuric acid, corrosive sublimate, chlorine and other chemicals have also yielded membranous exudations, so that, in reality, there is nothing characteristic about a diphtheritic deposit.

Virchow early made the classification of inflammatory products of mucous membrane into catarrhal, fibrinous and diphtheritic, while to Weigert belongs the credit of having experimentally shown what conditions produce these various forms. A catarrhal inflammation is the result of irritation of the mucous membrane, by which the nutrition of the epithelial layer is modified, but no destruction of that layer takes place. If the irritation is more severe, so that the epithelium is destroyed, but the mucosa remains intact, we have croupous or fibrinous inflammation. When diphtheritic, there is actual death of a part of the mucous membrane, the tissue is converted into a tough membrane, like coagulated fibrin, while the necrotic parts are saturated with coagulable lymph. This saturation may result from the underlying strata, where the tissue dies gradually in successive thin layers, or, if the lymph channels remain open, when it dies en masse.

Now, according to this classification, we find a croupous inflammation of more frequent occurrence in diphtheria than a diphtheritic one, the spread of the disease being apparently from the surface inward. Diphtheria frequently begins, as a limited deposit, in a very circumscribed area, from which, by gradual extension, there is involvement of the mucous membrane lining, respectively, the nose, Eustachian tube, mouth, larynx, trachea and bronchi. The bearing of the local spread of the disease upon the necessity for prompt institution of local treatment is sufficiently obvious.

It must be apparent, from what has been said as to the character of exudation resulting from irritations of different degrees of intensity, that we may have examples of genuine diphtheria with products that are, in the one case, simply catarrhal, in another, fibrinous, and in a third, diphtheritic, just as we have cases of typhoid fever known as walking cases, cases with some prostrations and diarrhœa and moderate fever, and other cases with high fever, the typhoid state of coma, all occurring in the same epidemic, and, presumably, from the same cause; as witness the varying intensity of cases observed here during the typhoid epidemic of a few years ago, when a common source of infection was furnished by the drinking water from the Ohio river. Cases of supposed simple catarrhal pharyngitis, followed by the familiar symptoms of diphtheritic paralysis, have been reported; so that it would appear that diphtheria is not to be made dependent upon diphtheritic membrane as a pathognomonic sign.

That the diphtheritic poison, when taken into the body, should in the vast majority of cases fasten itself upon the fauces and there expend its force, is certainly not more strange than that the typhoid poison, gaining access, as now generally conceded, through the alimentary canal, should traverse the whole length of this tract to finally locate in the lower portion of the ilium, there to induce the lesions characteristic of this disease. Nor need we go farther than the physiological functions of the body, in which each of the various glands abstracts, from the same general mixture of blood, those substances necessary and peculiar to its own secretion, allowing all others to traverse its substance unchanged. As between certain poisons entering the economy, and certain of the organs composing that economy, we may

speak of a vital attraction, comparable, in many ways, to the chemical affinities of certain elements.

The deposit in the pharynx is not, however, a necessary preliminary to general infection. A case is reported by Paterson (*Med. Times and Gazette*, 1886), fully illustrating this: A tenant farmer lost two children during an epidemic of diphtheria; a third child, then suffering with the same affection, experienced a severe suffocative spasm, to relieve which the father carried his finger well back into the throat. There was a recent wound upon his finger; and, in this wound, there soon appeared a diphtheritic deposit, accompanied by severe general symptoms. The local process gradually extended, so as to involve the whole finger, but healed after a short time. There was not, at any time, any affection of the pharynx. Several weeks later a general paralysis occurred, from which the patient had not fully recovered at the end of four months.

No consideration of the pathology of diphtheria would be complete, that failed to enter briefly upon the complications and sequelæ. Of these, the most noteworthy, the most distressing to the patient, the most embarrassing to the physician, and the most serious in its direct results, is the so-called diphtheritic paralysis. Except that it occurs within a reasonably short time after diphtheria, and must be made dependent upon the action of poisons generated during the continuance of that morbid process, there is nothing, absolutely nothing, peculiar or idiopathic in this paralysis. The cause of the diphtheritic paralysis omitting the paralyses occurring in the fauces would seem to be, in each and every case, a polio-myelitis anterior of irregular distribution, with conservative morbid changes in the nerve fibers of the anterior roots, is conclusively shown by Dijerine, Abercrombie and Kidd. There is thus the closest resemblance between this disease and the acute essential paralysis of children. In both conditions, the cause of the paralytic symptoms is an inflammation of low grade, involving the anterior bones of grey matter of the spinal cord. This leads to swelling, degeneration and disappearance of ganglion cells, with fatty and granular degeneration of the nerve fibers connected with these. Generally there follows a slow, but more or less perfect restitution; save in those instances, in which the groups of ganglion cells whose fibers form the phrenic nerve, participate in the inflammation. Here death ensues early in the course of the paralysis from the embarrassment of respiration.

The explanation we would give as one best fitted to the case, is that every diphtheritic paralysis is the direct result of a poison introduced into the circulation or acting upon nerve tissue at the seat of the diphtheritic process, wherever that may be. This noxious material may be compared with the poison of rabies in the slowness of its action; as an appreciable interval usually elapses after the relief of the diphtheria, before paralytic symptoms are noted. In character the poison is to be reckoned with the ptomaines, and is, doubtless, one of the incidental products resulting from the activity of the micro-organisms flourishing at the seat of the diphtheritic deposit. Once introduced into the circulation it may, if furnished in large amount, so thoroughly overwhelm the economy as to induce death during the acute stage of the exudation; more frequently its effects are only made apparent after some time.

As in the case of nearly every organic toxic substance, the intensity of the after effects is not by any means proportioned to the amount of virus introduced; whence it results that what was apparently but a mild tonsillitis may be attended, later, by a paralysis equaling in its distribution that which follows upon a very malignant attack of diphtheria. That absorption of a material, so deadly in its effect upon the nervous system, goes on at the seat of deposit is another warning for the early resort to local measures.

Of very great interest in this day of comparative pathology is the relation of this disease in the human subject to similar affections in lower animals. Epidemics of a process very similar to diphtheria have been observed in calves, pigeons and poultry. Tredelenburg was the first to attempt the inoculation of diphtheritic membrane from patients upon rabbits and pigeons. Of his sixty-eight experiments eleven were successful, eight upon rabbits and three upon pigeons. An exquisitely contagious form of diphtheria has been found in calves, first extensively described by Dademan in 1876. This he regarded as identical with diphtheria in the human subject, as the child of a coachman, living on the place where the epidemic occurred, had died of diphtheria a short time previously, and had been buried on the place. This point is one which intimately concerns the officers of public health, and should play an important role in prophylaxis and treatment. It argues strongly for the necessity of a better acquaintance with comparative pathology.

It remains only to allude briefly to the pathological anatomy of this disease. In addition to the local changes at the seat of the morbid process there have been found parenchymatous swelling of the liver and spleen, parenchymatous nephritis, effusions into the serous cavities, hæmorrhages in all organs, including the brain, infracts in the white matter of the brain, in the basal ganglia, crura, pons, cerebellum, medulla and cord, swelling of the spinal ganglion cells, and of the anterior and posterior roots. The nerve sheaths have been found infiltrated with granular bodies. The heart is usually the seat of extensive degeneration of muscular fibers, which become granular, lose their striation and show proliferation of the nuclei of the sarcolemma. These changes explain the instances of sudden death from heart failure following diphtheria. Sometimes the failure of the heart occurs gradually, being preceded by a dilatation of the heart due to weakened contraction, in the face of great resistance in the general circulation.

GALVANISM A GALACTOGOGUE.—A CASE.

FRANK R. FRY, M.D., ST. LOUIS.

Mrs. A. B. æt. 19 years, well-developed, fine and healthy-looking woman, of German extraction.

Had been wet-nursing for several weeks, since birth of her baby. Had had an abundance of milk. Had had some difficulty with her employer; and also with her husband who had sued for divorce and won his case. On account of these troubles she had been greatly worried and in much anxiety. Lactation stopped entirely.

She was under Dr. L. D. Sebree's observation at the Medical clinic of the St. Louis Medical College for several days, when ordinary remedies were used to re-establish the flow of milk without the desired result. He referred her to me, requesting that we use galvanism. Within a short time after the first seance, the patient states, the breasts were beginning to fill. On the second day after, when she came to us again, according to instructions, although she had only a short time before nursed the baby, her breasts were well distended, bearing a marked contrast to their condition at her first visit, when they were comparatively flabby. We gave her a second seance; and she has not returned since

The application consisted of a large lead electrode (6x6 ins.) which was conveniently moulded to cap over the breast, connected to the negative pole. The anode (3x5 ins.) was placed on the back of the neck. Both electrodes were covered with absorbent cotton pads. The current consisted of an average of 10 milliamperes, continued for 8 minutes on each side; the electrodes being shifted some when she complained of their burning.

The patient was so well pleased with the result that I think we would have seen more of her if the flow had not continued to be satisfactory.

A CASE OF EXTRA-UTERINE PREGNANCY OF FOUR YEARS AND EIGHT MONTHS DURATION, COMPLICATED BY ENTERO-UTERINE FISTULA.

BY R. R. KIME, M.D., PETERSBURG, IND.

Read before the Mississippi Valley Medical Association, at Louisville, Ky., October 9, 1890.

Mrs. B., æt. 27 years at the time pregnancy occurred. Menstruated first at 17 years, was never regular; there were always severe pains at the periods; chills; at times she was delirious. Married at 22 years, first confined eighteen months afterward; severe labor, forceps being used; the child was born dead, and the patient was sick three months. Second confinement two years after first, not so difficult; child was born dead; the placenta was adherent. The third and present pregnancy occurred eighteen months after the second. She first felt movements December 25, 1885, continuing until the night of January 18, 1886, when she complained of severe pain and active movements, after which she felt them no more. I was called, arriving the morning of the 19th; found her resting comparatively well. There was no special evidence of severe shock; the bowels were somewhat tender and enlarged by a tumor corresponding to a five months' pregnancy; there were no fœtal movements and no beat of the fœtal heart. I gave treatment for what I supposed was enteritis, complicated with malaria.

As the patient lived seven miles in the country I did not see her until January 21 and February 3. Not being satisfied with her condition, and as she believed herself pregnant, Dr. C. H. Fullinwider was called in counsel on February 5, 1886, at which time she was having some hæmorrhage from the bowels. After careful examination we decided the probabilities were that she was not pregnant. The fever and inflammatory symptoms gradually subsided. June 12, 1886, four months afterward, she came to my office and Drs. Adams, Fullinwider and myself examined her. We found a tumor attached to, and seemingly imbedded in, the right side and front wall of the uterus, reaching one inch above the umbilicus. Measuring transversely, one inch below the umbilicus, it was eight inches; longitudinally it was five inches; the uterus was five and one-half inches in depth. From the location of the growth, its firmness, its attachments, and the history of the case, it was diagnosed as a fibroid tumor of the uterus, and treatment by electricity and ergot was instituted. This effected a marked diminution in the size of the tumor (at least one-fourth), with marked improvement in the general condition. She passed from under treatment during 1887 and 1888. The patient again called at my office February 11, 1889, about two and one-half years from the date of the last examination. She then complained of increase in the size of the tumor, and stated that her general health was failing. At times she suffered from severe pains, and she had noticed a bloody discharge. I used galvanic electricity, positive pole in the uterus, and prescribed ergot with tonics. The hæmorrhage checked up, leaving a bloody purulent discharge.

She returned on March 20, saying that the "tumor had dropped down," and she was then complaining of weighty, bearing-down sensations in the lower part of the bowels. The tumor then measured seven and one-half inches transversely, by 4½ inches in length, and it was one and one-half inches lower. The cervix was more patulous, and was low down in the vaginal canal.

I continued ergot and tonics, and applied electricity April 6, 13 and 17. She returned home on the 17th; did some stooping work that night and began to suffer severe pains lasting through the next day and next night; they became so severe that I was sent for. On arriving next morning I found her resting quietly; a profuse, purulent, offensive discharge had commenced in after-part of night. At the time I thought this was the result of the use of the electricity, but later it proved to be from rupture of fœtal cyst. The tumor became smaller

and the patient improved. She again called at my office March 19, 1890, ten or eleven months from last examination, complaining of occasional severe pains. She was emaciated, and there was fever with indications of septi cæmia. There was then no difficulty on examination in deciding that we had a case of extra-uterine pregnancy to deal with.

By request she consulted Dr. S. E. Munford, of Princeton, who advised dilatation of the cervix and removal of the fœtal structures without abdominal section, if possible.

I commenced dilatation April 5, by tupelo and elm tents; it was completed with Barnes' bags after three days of very difficult and painful work. A canal three and one-half or four inches in length had to be dilated. On the second day of the dilatation corn husks and fæcal material were found in the cavity of the womb. It was learned that the patient had eaten some corn four or five days previously.

She was anæsthetized April 8, and the greater part of the skull, spinal column, ribs and extremities of the fœtus were removed. There were present Drs. S. E. Munford, A. R. Byers, C. H. Fullinwider and J. B. Duncan. After removal of the fœtal bones the cavity was thoroughly irrigated and two large rubber drainage tubes were introduced some eight or nine inches into the cavity for drainage and irrigation. An enema next morning produced an evacuation of the rectum, after which time the fæcal discharges passed through the womb and vaginal canal only, for several days. A rectal injection of a pint or more of water would pass out through uterus and the drainage tubes.

I used both rectal and intra-uterine irrigation; prescribed liquid diet, kept the tubes in three or four days, when they came out and the patient refused to have them re-introduced on account of pain. At the end of ten or twelve days the fæcal discharges began to follow their natural channel and by the end of four weeks they entirely ceased passing by the uterus. Patient made a rapid recovery and is now enjoying good health, but from past experiences desires to avoid maternity unless she can become a mother as other women do.

The above is the history of a case which I shall now class as interstitial pregnancy.

Of the later classifications of ectopic pregnancy by authorities, all forms are classed under three general heads, viz.: Ovarian, tubal and abdominal—except Tait, who doubts the existence of the ovarian and excludes the primary abdominal. Tait's views that normal fecundation occurs in the uterine cavity only, and that all cases of erratic gestations are primarily tubal, but by primary and secondary rupture may become intra- and extra-peritoneal, greatly simplifies this vexed question. If it be true that fecundation occurs normally in the uterine cavity we can better understand why ciliated movement in Fallopian tubes is toward the uterine cavity. We can also better understand why disease of mucous membrane lining the Fallopian tubes and dilatations of the same favor ectopic pregnancy.

Zinke (*Amer. Jour. of Obst.*, February, 1890, p. 136), in referring to this subject states: "If Tait's views be correct, extra-uterine gestation would never occur for the following reasons:

1. Diseased tubes which would facilitate the passage of the germ imply a condition which renders the tubes patulous throughout, in consequence of which the spermatazoa would obtain a ready entrance.

2. Tubes so affected would certainly as readily admit the passage of an ovum, impregnated or otherwise, and thus rather tend to prevent than cause ectopic gestation."

The writer certainly failed to consider the migratory power of the spermatazoa to force their way out of the patulous tube, even with less difficulty than in the normal state, for it would not have to oppose the ciliated motion. Also that the fecundated ovum has no inherent power to force its way out of the tube, the ciliated motion being lost, and rhythmical action of the tube being nil; hence it would be inevitably left where it was fecundated.

We leave this question of normal fecundation occurring in uterine cavity only, open for discussion.

To return to our case of interstitial pregnancy, which variety Tait (*Med. and Surg. Monographs*, vol. 5, No. 2, p. 469) says "is rare and uniformly fatal by primary rupture before the fifth month."

To briefly recapitulate, we have the history as follows: No flow from first conception, this being her third; no discharge of decidual membrane; no rupture unless on the night of January 18, 1886, and condition did not indicate this next morning; firmness of the tumor; its situation; absence of fœtal movements or beat of fœtal heart. Hence the case was diagnosed fibroid. But later, when viewed from a different standpoint, we had reduction in size of the tumor due to absorption of liquor amnii; two years later, increase in its size, due to decomposition and pus formation, the bloody discharge the result of rupture of tissues between the fœtal cyst and the uterine cavity; dropping down of the tumor, which meant the passage of the fœtus into the uterine cavity; the profuse discharge, the result of rupture of the fœtal sac.

The entero-uterine fistula was probably the result of penetration by the fœtal bones of the uterine or cyst wall and the intestinal wall, which had been made adherent by some previous inflammation. The fistula gradually healed, the patient improved rapidly and is now well and happy.

Pertaining to this subject we collect the following:

Tait (*Med. and Surg. Monographs*, vol. 5, No. 2, pp. 518 and 469) says: "The interstitial variety cannot be diagnosed before rupture. The rupture is intra-peritoneal."

E. E. Montgomery ("American Association of Obstetricians and Gynæcologists," vol. 1, 1888), states:

"In the interstitial form the rupture may occur either into the uterine canal or the abdominal cavity."

Maschka (*Wien. Med. Wochenschrift*, 1885), reports: "A woman, æt. 29 years, died suddenly, and criminal abortion being suspected, a judicial autopsy was made and an interstitial pregnancy with rupture was found. The body of the fœtus had passed into the uterus and had been removed, but the head was torn from the body and remained in the sac."

Parks, of Chicago (*Amer. Jour. of Obst.*, vol. 20, p. 537), reports a case of interstitial pregnancy, with removal of products of conception through the uterine cavity.

Wathen, of Louisville, (*Amer. Jour. of Obst.*, vol. 22, p. 791) reports a case of interstitial pregnancy rupturing into the uterine cavity.

Hence we are led to conclude that it is almost impossible to diagnose interstitial pregnancy before rupture; that rupture may occur into the uterine canal as well as the abdominal cavity, and that it is not invariably fatal.

FURTHER NOTES ON THE CHIGGER.
(*Leptus Irritans*).

BY DR. H. M. WHELPLEY, F.R. M. S.

Read before the St. Louis Club of Microscopists.

This exceedingly interesting little fellow formed the subject of a paper that I read before you some months ago. The publication of the article (*Popular Science News*, February, 1890; *Meyer Bro's. Druggist*, April, 1890) has attracted considerable attention and brought me numerous communications on the subject from all sections of the country, a few from England as well as Europe. From the information contained in this correspondence, I have gained several new points about the habits and life work of the *leptus irritans*. These I have collected and bring before you to-night.

In the first place, I desire to state that the *leptus irritans* is no relation to the *plexus penetrans* of South America and the West Indies. The latter insect is variously known as the chigger, jigger, chiga, chigoe, chique, chic, chics, etc. It is a small insect of the flea family (*pulexœ*), while the *leptus irritans* resembles the tick family (*exodidœ*). The application of the name chigger to both animals has caused some who are familiar with the South American insect, but not the North American one, to suppose that I was in error when giving the *leptus irritans* the vulgar name of "chigger." As this is the most common name of the animal, I was obliged to accept it.

I find that this pest to human beings is not confined to as small a section of the United States as my first investigations indicated. The Eastern and Southern States share with the Mississippi valley in harboring the chigger. I have not heard of it in latitudes north of the fortieth degree, nor does it seem to thrive in the far West.

The chigger does not confine himself to a strictly human diet, but attacks the house fly (*musca domestica*). I have not personally observed the parasite on flies, but Dr. G. De Von informs me that he has examined flies afflicted with chiggers. He thus accounts for the transportation of chiggers to infants that do not come in contact with living vegetation.

Dr. J. T. Whitlock finds that chiggers are also very troublesome to young fowls, especially small chickens. He has observed the parasites collected in lumps as large as the head of a pin, and has seen as many as a dozen such lumps on one chicken not two weeks old. He further states that in such cases the chick generally dies promptly. He reports the case of a chick dying after a number of tetanic spasms, lasting for perhaps an hour.

THE CHIGGER (*Leptus Irritans*). 250 DIAMETERS.

There is a great difference in the degree of susceptibility of different persons to these parasites. Several persons have assured me that they are never attacked by chiggers, bed-bugs, fleas and ticks. On the other hand, one of the most prominent microscopists of this age writes that his daughter is so severely afflicted by chiggers that she has been confined to her bed for several days.

Some specimens of the insect are almost transparent, but they all become darker in color as they engorge with blood.

I have also found another common name for the insect, as in some localities it is known as the sea-tick.

In addition to the list of remedies given in my last paper, I find that both kerosene and spirit of camphor are extensively employed to prevent the attacks of the parasite, and to cure sores when formed.

Many correspondents have confirmed my statement that chiggers are partial to blackberry bushes. Attention has also been called to the fact that the insects have a special liking for peach trees.

ERRATUM.—At the end of the second editorial of our last issue, the type made us say reacting, instead of reaching.

TRANSLATION.

SYPHILIS AND MARRIAGE.

Clinical Lecture by PROF. FOURNIER.

Translated by WM. N. BEGGS, A.B., M.D., St. Louis, Mo.

GENTLEMEN.—Among the subjects connected with this problem which I have already frequently discussed with you, I shall to-day speak of the following:

HUSBAND SYPHILITIC, WIFE SYPHILITIC, AND PREGNANT.

Let me explain. A syphilitic man marries too soon and infects his wife, she becoming pregnant at the same time. In this case all the evils are present and the situation is grave. The prognosis is especially serious for the child. It is destined to die before birth, or to come into the world in a dying condition, or to die shortly after birth, or perhaps to live, but to suffer from syphilis.

This situation, grave as it is, is not absolutely desperate, either for the present or for the future. In the future, if the parents carry out a rational course of treatment, happy pregnancies may result. As for the present, the child is not absolutely condemned.

1. Because, thanks to treatment, you can (not always, it is true,) prevent the abortion. The child will, of course, be syphilitic, but it will be viable.

2. Because, in the most fortunate cases, thanks to treatment, you may obtain a healthy child. This is a rare occurrence, but is not impossible. One of my patients, infected by her husband, became pregnant five months later. I saw her in the second month of her pregnancy, exhibiting secondary symptoms. The child was born healthy; it is now 5 years of age and has never presented syphilitic symptoms.

M. Langlebert has reported a similar case. It was a woman, who, in the third month of pregnancy, exhibited severe syphilitic symptoms. M. Langlebert instituted proper treatment; the pregnancy followed its normal course and resulted in the birth of a well nourished girl; the child is now two years old, and has never presented syphilitic symptoms.

Let us now proceed to the indications. The husband will be warned, that is a matter of course.

What must be done for the woman? I do not hesitate to answer, she must be treated. This reply would have seemed heretical thirty or forty years ago. Syphilitic women were denied treatment during pregnancy, and the following reasons were given:

1. Mercury would induce gastric disorders, increase the vomiting to which the pregnant woman is already very subject. She could, on account of the gastric disturbances, fall into a grave condition.

2. Mercury would anæmiate the pregnant woman and augment the hydræmia which already exists on account of the pregnancy.

3. It would provoke abortion.

Let us examine the various points:

1. It is easy for us to give mercury in such a way as to avoid gastric disturbances. Let us choose the preparations which are the least repulsive to the stomach. We will prescribe neither the liquor of van Swieten nor the syrup of Gibert, the taste of which is very disagreeable. We will choose a more easily tolerated medicament, the proto-iodide, and that in a dose which does not offend the stomach, 0.03–0.05 grain (one-half to five-sixths of a grain). If it is tolerated we can gradually increase the doses. Further, we can add a little opium as an adjuvant, and prescribe conjointly the wine of gentian and coffee, which causes the mercury to be well digested. Moreover, if the stomach is too rebellious, we always have a great resource, mercurial frictions, which we employ freely here, and from which German accoucheurs have the best results.

2. The anæmia which mercury produces is a purely theoretical objection, against which experience protests. Here, where mercury is given systematically, we have never seen this anæmia produced. On the contrary, it has been properly said "mercury is the iron of syphilis."

3. Mercury produces abortion. Let us leave aside the mercury employed in the arts, which in certain operatives has frequently produced abortion. Here it is a question of mercury employed in therapeutic doses only.

It is not difficult to quote statistics; among so many syphilitics taking mercury so many (and the number is large) have aborted. This, gentlemen, is a mistake in logic, however. It is not the mercury which has caused them to abort, it is the syphilis.

I will prove it:

1. Many syphilitic women abort without having taken an atom of mercury. This is what happens in unobserved, and, consequently, untreated syphilis. The abortions are, in such cases, so frequent, that, it may be said, they are the rule.

2. Many syphilitic women, having had a series of abortions, succeed in conducting a pregnancy to full term only when they have been treated with mercury.

I may say that at the present time there is no disagreement over this point. I can assure you that all of our hospital accoucheurs give mercury in such cases.

The treatment must be administered in a consecutive manner during the entire course of pregnancy with some intervals of cessation.

Intimately united to the preceding is a subject which should now occupy our attention. I speak of a genuine social duty which devolves upon the physician, who should be a zealous aid to public prophylaxis.

The child, born of this syphilitic family, will almost certainly be syphilitic. Now a syphilitic child is a powerful means of syphilitic contagion.

What happens if this child is entrusted to a nurse? He certainly infects her. Now think of the rebounds of contagion which may produce what I have called cascades of contagion. First, the child can infect his surroundings, his relatives and attendants; as for the

nurse, she is liable to infect her husband, her own child, other infants to whom she casually gives the breast, etc.

I have many examples in my notes.

A young man infected his wife who gave birth to a syphilitic child. The child infected the nurse. She infected her own child, then another infant to whom she chanced to give the breast, and finally her husband; a total of four infections.

There are cases more serious still. A child infected her nurse. She infected another infant, and then a third. A friend of the nurse one day suckled one of these infants and contracted syphilis. She in turn infected an infant. Total five infections, and of these two children died.

Frou (of Lyon) reports that one nurse infected three infants; each of these infected their mothers. The three mothers in their turn infected their husbands. Total, ten infections.

Veritable epidemics of syphilis have thus been imported into villages by a single syphilitic child. In one case reported there were twenty-five contaminations.

This syphilis is almost always unrecognized, hence the danger. No treatment intervenes, and the afflicted may die, or are burdened with grave lesions. I will give a few examples:

A child infects his nurse, who infects her husband. He is not treated and gets a severe iritis, from which the eye is lost. The wife, years later, has a syphilitic paralysis, symptoms of cerebral syphilis, and dies.

Another case: A nurse is syphilized and infects her child, who is not treated. It dies in a few months. She herself has a severe iritis followed by loss of an eye. A year later she gives birth to a child which dies at the age of two months.

It is the duty of the physician, who knows these horrible dangers, to put forth all efforts to prevent them. For this there is only one means in existence; it is, that this child, dangerous for all the world, must remain beneath its natal roof and must be nourished by its mother. It is necessary before the confinement to warn the husband, who may be perfectly ignorant of the danger; it is necessary to bring home to him the dangers of infection to which a nurse would be exposed, and the serious consequences which could result from it; charges, scandal, suit perhaps. All this can be avoided, you should say, by having the mother nurse her child. If she herself desires it, encourage her. If not it is necessary to persuade her. You may be assured that the husband, whom you will have thus frightened, will second your efforts.

Some objections may, perhaps, arise in your mind. If the mother is healthy, will she not be infected by the child, perhaps? If, on the other hand, the child is healthy, and the mother syphilitic, will not the mother infect the child?

Let us examine this question in detail. There are four conditions possible, and it is impossible to conceive of others.

1. Mother and child are both healthy.
2. Mother and child are both syphilitic.
3. Mother is healthy, the child being syphilitic.
4. Mother is syphilitic, the child being healthy.

In the first case there is danger neither for the mother nor for the child, since both are healthy.

In the second it is the same. Neither syphilitic has anything to fear from the other.

The third case, on the other hand, requires consideration. Cannot the syphilitic child infect its healthy mother? This could be conceived of *a priori*. This is not the case, however. You remember perhaps the law of Baumies, which I have more than once repeated to you, "a syphilitic child has never been known to infect its mother." That is, the mother, healthy in appearance, is syphilitic in reality; she has latent syphilis.

And, gentlemen, it is the same in the fourth case we have to consider. Here again Baumies' law finds its application, "the syphilitic mother does not infect her healthy child;" and that for the same reason. This child, healthy in appearance, is syphilitic in reality.

I will add further that were we not assured by experience as we are in these latter cases, our course of conduct ought not to be changed. The maternal nursing would be just as imperative a duty, for we have not the right to dispose of the health of another and to expose another woman to an almost certain infection. If maternal nursing is impossible an expedient must be sought, as the employment of a female animal, the ass, for example.

Gentlemen, thanks to these thoughts, it will be possible for you to fulfill a social duty, that of combatting syphilis, and circumscribing its limits as much as possible.—*La France Medicale.*

The United States and its Doctors.—There is certainly no more curious social phenomenon than that of the extraordinary popularity of the medical calling in this country as a means of securing a livelihood. The subject is one that is often dwelt upon, but we doubt if many even yet realize the grotesque misproportion which medicine in the United States holds to other bread-winning occupations. Here are some of the naked facts: France has 38,000,000 of population, 11,995 doctors, while it graduates 624 medical students in one year. Germany has 45,000,000 of population, about 30,000 doctors, and graduates 935 students in one year. The United States has about 60,000,000 of population, nearly 100,000 doctors, 13,091 medical students, and graduates 4,740 students in one year. Germany, which has relatively less than half as many doctors as America, is already groaning over its surplus. When one compares France with this country, the excess of medical men seems most astonishing. A comparison of the United States with European countries, in whatever way it is made, leads one to think that there is something almost morbid in our medical fecundity.—*Medical Record.*

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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SATURDAY, DECEMBER 20, 1890.

IS CANCER OF A POISONOUS NATURE?

Prof. A. Adamkiewicz, of Krakau, read a very interesting paper before the Royal Academy of Science, at Vienna, on this subject (*Deutsche Medizinal Zeitung*). He said that certain properties common to malignant growths gave them a peculiar position in pathology. They are in many ways similar to "infectious growths" (tuberculosis, syphilis, etc.), but differ from them considerably in other respects. This similarity between a carcinoma and an infectious growth lies in the fact that after having once gained a footing in the organism they spread further and overcome it by degrees. They differ in that the infectious growths are the products of a known poison or virus, whose existence and manner of entering the body and of transmission from one organism to the other are pretty well recognized; while as regards the origin of carcinoma we find ourselves in darkness, we are unable to transmit it from one person to another, and are, so far, ignorant of the existence of such a thing as a "virus" of cancer. The fact that he was unable to carry carcinoma from one body to another, Cohnheim regarded as convincing evidence that there was no such thing as a "virus" of malignant growths. He, therefore, explained the spread of carcinoma in an organism so affected, not by the theory of self-infection, but regarded it as the result of a mechanical distribution of the cancerous cells, which possessed the ability, in contrast with other tissue elements, to develop and form new (metastatic) cancer nodules when arrested through embolism. This ability was not to be attributed to any infectious character of the cells, but was to be explained by their embryonic nature. This was one point in which embryonic tissues differed from mature tissue, that they were capable of propagating on a strange soil, under favorable circumstances.

In this manner Cohnheim arrived at his well-known hypothesis, which regards malignant growths as products of superfluous embryonic cells which were not used in the building-up of physiological structures, and which later in life, under the influence of some impetus, found occasion to develop pathologically. To explain the nature of this impetus several theories have been advanced, of which that of irritation and that of diminished power of resistance of the diseased—and usually elderly—organism are the most well known.

Without considering this hypothesis and these theories any further, Adamkiewicz proceeds to give the reasons by which he thinks he is justified in assuming the existence of an actual poison in the substance of a carcinoma.

Since it is a prominent peculiarity of the viruses of disease that they have not only a choice as to the persons to be attacked, whom we speak of as predisposed, but that they also elect the organ of the body which is to be invaded (what we might refer to as the property of predilection of the poison), it is easy to justify the supposition that in the transmission of a human disease virus to an animal, it might, first, change its properties, and second, might differ in its action, according to the site of inoculation.

While these suppositions on the one hand tend to explain the unsatisfactory results of the attempts to transmit carcinoma from man to animals, on the other hand they open up new questions for explanation. These questions are:

1. Is it, in the first place, possible to demonstrate any poisonous property of cancer-tissue, no matter how developed, upon the animal organism?

2. Is the activity of the cancer-poison upon the animal dependent on the location of the site of inoculation?

Adamkiewicz' experiments upon rabbits have so far furnished the following answers:

1. There is a poison in recently removed and unchanged carcinomatous tissue.

2. This poison can kill animals in a few hours.

3. It acts only on the nervous system, and death is caused by paralysis of the brain.

4. Boiling heat and disinfectants (carbolic acid, etc.) destroy the activity of this cancer-poison.

5. The micro-organisms which are constantly to be found in cancerous substance and at the site of inoculation, do not, however, seem to be the carriers of this cancer-poison.

6. By transplanting cancer tissue upon a favorable soil the latter also acquires poisonous properties; it can not be stated definitely to what extent the micro-organisms are concerned in the production of these properties, which develop on this soil at the same time.

7. No other living tissue, whether of physiological or pathological origin, possesses (as far as can be determined from his experiments) the poisonous properties of cancer.

8. This poison has been found only in true carcinomas; in sarcomas and adenomas he has not yet been able to prove the existence of such a poison.

9. The action of the poison is so rapid that it may be of value as a means of rendering evident the cancerous nature of a pathological growth.

10. Tissue from the cadaver possesses a poisonous action very analogous to that of carcinomatous substance; this analogy is so great that it may be positively stated that malignant growths produce during life a material having an action similar to that of the poisons from the cadaver.

Adamkiewicz intends to produce the proof of these conclusions in a more extended form.

What May be Expected of Koch's Method.

The Berlin correspondent of the *Medical Record* gives much information direct from the seat of war, concerning the new method, and we glean from his report the opinions of the various physicians who have been employing the new treatment. Dr. Gerhardt, at the Charite, affirms the specific action of the lymph upon the tubercular tissue, and its importance in diagnosis. He is quite conservative as to its curative powers, and said that we cannot estimate them properly until a year or two has elapsed. He said the reaction was by no means uniform, the fever appearing at times in a few hours, at others only after twenty-four hours, and sometimes remaining absent. During the reaction hæmoptysis sometimes appeared, so that great caution was necessary. Dr. Ewald has treated 90 cases at the Augusta Hospital, and in most of them their condition has improved, both subjectively, and as regards symptoms, such as appetite, sweats, cough, etc. The chest shows no change, save an increase in moist sounds during and after reaction. He also said the reaction varied greatly, as to fever, headache, malaise, nausea, etc. An exanthem sometimes appeared. In a patient with pulmonary and intestinal tuberculosis, who had received one injection shortly before he died, no effect on the intestinal ulcerations was found at the post-mortem. The observations of Dr. Guttmann, Director of the City Hospital, who has 90 cases under treatment, coincide in every particular with those of Gerhardt and Ewald. Since the experience and knowledge is only gradually accumulated, visiting physicians will be able to see and learn much more in three or four months than they will at the present time. Patients should be discouraged from coming, since the treatment is only in the stage of experimentation.

Dr. Rosenbach, of Breslau, classifies his cases as follows: (*a*) Suspicious cases, *e.g.*, catarrh of the apices, without bacilli in the sputum, and phthisical cases, *e g.*, vomici and old excavations and with bacilli. (*b*) With absence of bacilli but clinically of a phthisical nature. (*c*) Phthisical infiltrations with bacilli appearing during a long period of observation but with either no fever or very slight fever. (*d*) Joint affections of a dubious character. (*e*) Clinically undoubtedly tubercular. (*f*) Affections of the bowels. (*g*) Affections of the larynx.

Experimentation with these cases, though but for a short period of time, has led him to the following conclusions:

1. It is always advisable to begin with small doses, namely, one milligramme, and, if there be no reaction fever, to increase the dose by degrees. After the patients have become used to small doses they can be increased gradually, with longer intervals between each dose, and always with the greatest caution. 2. In phthisis of the larynx there was reaction in only one case. 3. The time at which the injection is administered has an influence on the febrile reaction, the temperature rises quicker and higher if the injection be made at the time when the fever usually comes on. 4. The injection is made by Pravaz's hyodermic syringe containing one cubic centimetre of Koch's fluid, which must be diluted with one-half per cent. solution of carbolic acid before the injection is made. The best place for making the injection is the cutis of the abdomen.

Dr. C von Noorden, of Berlin, an assistant at Gerhardt's Clinic, describes five cases in which tuberculous spots in the lungs could not be made out on physical examination before injection, but after injection the diagnosis by physical signs was posssible; the affected parts became more thickened and infiltrated. He warns against using the remedy where large portions of lung tissue are affected, for in these advancedcases the thickened state of the affected parts after injection might be fatal through the diminution of space for air in the lung. These transitory infiltrations probably bring on the healing process. Dr. E. Kromeyer, of Halle, examined portions of lupus tissue excised from a patient affected with that disease, and concludes that the injection brings on an inflammation of the structures surrounding the tubercle, which results in suppuration of the same.

A remarkable case treated by Dr. Levy is as follows: A child, æt. 4 years, with tubercular disease of the tarsus of several months' standing, showed a characteristic fistulous opening over the tarsus of left foot, discharging scanty, thin pus. The treatment was attended by most extraordinary results. The first six injections each produced a reaction, local and general, and the seventh failed to do so, and the patient was therefore pronounced cured. The foot is not swollen, painful, or tender, and the sinus is closed and covered by a firm pink scar.

The cases of lupus often change astonishingly. Many turn black, and look as if the actual cautery had been applied.

The reaction is frequently so severe that patients become unconscious, according to Dr. Levy's report.

The material does not kill the bacilli, as Koch himself had expected it would do. The tubercle containing tissue is separated from the healthy tissue, and yet in the former are the living bacilli.

PUBLISHERS' CARD.

It affords us pleasure to know that the profession in the North and Southwest appreciates a WEEKLY Medical Journal published in the West, although five years ago when we first commenced to issue the REVIEW as a Weekly Journal many of our good friends (who are always willing to give advice) prophesied it would be a matter of but a short time when we would cease to issue *weekly*. We are now happy to be able to realize such prophesy has not proven true, but on the contrary, THE REVIEW not only continues to be issued weekly but has been greatly enlarged in size and increased in literary work, although the price remains the same ($3.50 per year.)

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SIGNOR SUCCI, the Italian, who is attempting to fast forty-five days, in New York, is approaching the end of his time, and it looks now as if he would be successful in beating Tanner's record.

MEDICAL ITEMS.

HEADACHES OF CHILDREN.—Charles L. Dana says the headaches of children can be best controlled by small doses of iodide of iron or the citrate of iron and quinine.—*Arch. of Obst.*

EXPLOSIVE MIXTURES are: Chlorate of potash with catechu, galls, or tannin; one part of chromic acid with two of glycerin will explode; iodine and ammoniacal solutions; picric acid explodes when the powder is mixed with any other substance.

TO DESTROY THE SMELL OF IODOFORM.—Surgeons who still use iodoform to any extent may find it of advantage to wash the hands freely in linseed meal and water. The odor is said to disappear almost instantaneously.

STEEL PENS FOR VACCINATING.—Marechal, a French staff surgeon, recommends unsplit steel pens, sharpened, for use in vaccinating. A much better and more convenient plan is to employ lymph furnished on quills, using the latter for scarifying.

REMOVAL OF THE GASSERIAN GANGLION FOR NEURALGIA.—Mr. William Rose, Surgeon to King's College Hospital, recently reported to the Medical Society of London, the successful removal of the Gasserian ganglion for persistent neuralgia.—*Medical Record.*

AMENITIES OF A CHICAGO PRACTICE.—A physician in Chicago was nearly mobbed by an excited crowd a few days ago for declining to attend an accident in his neighborhood until he was assured that he would be paid. He said that he had already done enough of that kind of work for nothing.

NEURALGIA FOLLOWING INFLUENZA.—In facial neuralgia and other forms of pains in patients who have suffered with la grippe, Dr. Molony, of Balingarry, reports excellent results from exalgine in one to two-grain doses, repeated every four hours, if necessary. Relief occurs after a few hours.—*Diet. Gaz.*

CANCER MORTALITY AMONG THE JEWS.—An English paper states that one of the lecturers at Owens College, Manchester, not long since put forward the assertions (1) "that no Jew or Jewess has ever been known to suffer from cancer;" and (2) that "the immunity of the Hebrew race from this frightful scourge was attributed to their abstinence from swine's flesh."

ANTIPYRIN IN CHRONIC NERVOUS URTICARIA.—After detailing three cases of chronic urticaria, in which various remedies had been used unsuccessfully (alkaline washes, purgatives, salicylate of soda, quinine), Nitot (*Italian Journal of Genito-Urinary and Skin Diseases*) says he employed antipyrin in eight-grain doses daily with rapid improvement and recovery. On the strength

of his observations he comes to the following conclusions: Chronic nervous urticaria affects a preference for females. Antipyrin quickly cures recent cases, but in chronic cases improvement and recovery are much slower.—*Wien. Klin. Woch.*

Chloride of Zinc in Small Cystic Tumors.—Landerer has successfully treated five cases of ganglia, three of præpatellar hygroma, and one of ranula by injecting a one-tenth per cent solution of zinc chloride (three to twenty-five minims according to the size of cyst), and believes this method to be the surest, most convenient, and most free from irritation.

A Malpractice Suit.—A suit for alleged malpractice has been brought against the estate of a doctor in Ipswich, Mass., who has been dead for two years. The plaintiff had his arm amputated some years ago, and has lately been obliged to have a re-amputation on account of a painful stump. He now brings a suit for $20,000 damages, on the ground that the original operation was unskilfully performed.

Alvarenga Prize.—The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about $180, will be made on July 14, 1891. Essays intended for competition may be upon any subject in medicine, and must be received by the Secretary of the college, Dr. Charles W. Dulles, on or before May 1, 1891.

The Contagion of Small-Pox.—Dr. W. F. Suiter, of La Crosse, Wis., is responsible for the following: Some years ago I attended a man suffering with a broken leg in a log-house in the lumber woods. After he had been in bed some weeks, sufficient for union to take place, he one day pulled a wooden pin out of a hole in a log beside his bunk, and wrapped around the end which had been in the hole he found a wollen rag. He amused himself by picking the rag to pieces. Just nine days later he fell sick with the small-pox, and investigation developed the fact that twenty-eight years before a family living in that house had died of that disease and the rag had been put around that pin at that time.—*Med. Rec.*

The Gastric Juice in Diabetes.—In a long article on the condition of the gastric juice, saliva and perspiration in diabetes, Dr. Ponomaroff details a number of observations which lead him to dispute the assertions of some previous observers—*e. g.*, Heller and Frick, who believed that they had detected sugar in these secretions. With regard to the gastric juice, Dr. Ponomaroff points out that where this is obtained by making the patients vomit, what is obtained is not the gastric juice alone, but an admixture of that with a certain quantity of bile. This generally contains sugar, and therefore vitiates the result. When the œsophageal tube is used and the gastric juice free from bile is obtained, there is, he states, never any sugar in it.—*Lancet.*

Facial Erysipelas.—Although it is well known that erysipelas of the face often arises from a point of infection of the nose, it very often happens, as Lehrnbecher has pointed out, that in the treatment of the disease, little or no attention is given to the nasal cavity. It is sometimes wonderful what a mass of thick, bloody, bad-smelling pus can be washed out of the nostril. A nasal douche of three per cent boracic acid solution should be given every three hours, until the cavity appears to be perfectly sterilized, after which, to prevent drying of the mucous membrane, tampons with boracic acid ointment should be inserted. With these precautions the author has found that the duration and severity of the disease are much diminished. He applies nothing to the skin except cotton-batting or an oil compress.—*Ex.*

A Simple Method of Estimating Fat and Casein in Milk.—Dr. J. B. Nias (*Lancet*) has devised the following convenient method of estimating the fat and casein in milk in connection with the feeding of infants:

Place some of the milk in a test tube with a piece of red litmus-paper, add a drop or two of liquor potassæ—enough to render the milk distinctly alkaline as shown by blueing of the litmus paper—and boil. Set aside in a warm place, when the fat will rise to the top, a small but constant percentage remaining behind. The proportions can be determined by a graduated rule placed at the side of the tube. Remove the layer of fat with a small glass pipette, add sufficient acetic acid to redden the litmus-paper, boil, and set aside in a warm place. The whole of the proteids will be precipitated and the relative proportion can again be determined by the graduated rule.—*Medical News.*

The Treatment of Enlargement of the Spleen.—Mosler (*Wien. Med. Wochenschrift*) writes that all enlargements of the spleen, irrespective of their nature, size and duration, are frequently associated with a hæmorrhagic diathesis, which may not have become apparent. For this reason he disapproves of any operative procedure for the removal of the organ, and for some time has used a variety of other measures, chiefly injections, to reduce the swelling. He at first tried parenchymatous injections, by means of a syringe with a long needle, of weak carbolic acid solution. Later he injected pure Fowler's solution with better results—decrease in the size of the organ. Injections of iodine and of quinine he considers dangerous and has not tried, nor does he approve of the injection of ergot and its preparations. He believes that the cases suitable for injection are those in which the spleen is hard and not associated with extreme anæmia. Fowler's solu-

tion, he thinks, is better than the numerous other drugs which have been recommended for the purpose. The dangers of the injection are diminished by applying an ice-bag to the splenic region for an hour or two before and after the operation.—*Centralbl. f. Chir.—Med. News.*

SELECTIONS.

CLINICAL OBSERVATIONS ON THE ACTION OF CAFFEINE, MORPHINE, ATROPINE, ERGOT, AND DIGITALIS ON THE ARTERIAL BLOOD PRESSURE.

Dr. Sophie Frenkel (*Deut. Archiv. f. klin. Med.*, Hft. 6, p. 542) has carried out a series of observations on the effect of the above drugs on the blood pressure in man. The observations were made with the sphygmomanometer of von Basch, which is the only instrument by means of which blood pressure can be measured in man. It still leaves much to be desired, as it does not give absolute but only relative results, which, however, are very useful for comparison. Careful directions are given for the attainment of accuracy in the observations. Caffeine was given per os and subcutaneously in 15 cases of more or less severe heart disease with failure of compensation. It raised the blood pressure, removed the symptoms of loss of compensation, greatly improved the subjective symptoms, and increased diuresis. The rise of blood pressure was, however, always very moderate; it reached its height on the second or third day and remained so only for one or two days, after which it fell, but never to its original low point, the caffeine being continued all this time. There is no cumulative action. The diuretic action of caffeine does not depend on the rise of blood pressure, as the increase of urine precedes the rise of pressure and continues after it. The pulse rate was never affected. The effect of a single large dose given subcutaneously was studied in eight cases. In a few minutes there occurred a marked rise of blood pressure, and hence the author concludes that this is a rapid and convenient method of treating collapse, not only in cardiac but in other cases. Morphine, in doses of one-sixth to one-half grain, is often given in hæmoptysis, and hence its action on the blood pressure is of interest. Fifteen observations were made (mostly on patients with chronic nervous diseases), and it was found that the blood pressure remained unaffected in some cases, while in others there was a very moderate rise. The pulse rate was not affected. These results are in opposition to the generally received opinion, according to which morphine produces a slight fall in pressure. The beneficial effects of morphine in hæmoptysis are not to be ascribed therefore to its causing a fall of blood pressure, but rather to its narcotic quieting effects. No observations were made with it in cardiac cases, but depression of the circulation from morphine is certainly not to be feared. Atropine ($^1/_{150}$ to $^1/_{60}$ grain subcutaneously) caused a marked rise of blood pressure and pulse rate, lasting for about two hours. There was no effect on the amount of urine. Owing to its unpleasant effects (dryness of mouth, etc.) the use of atropine in cardiac cases is not advisable. Ergotin was found to cause a rise of pressure with slowing of the pulse. Digitalis gave a marked rise of blood pressure, the observations simply confirming the generally accepted views as to its action.—*Brit. Med. Journal.*

THERAPEUTICS OF SOME URINARY DISORDERS.

In comparing the various systems of which the human body is built up, such for instance as the nervous, respiratory, circulatory, digestive and urinary, the last especially enjoys a condition for the action of drugs which is not equally shared by the other systems, except, perhaps, the digestive system. Dr. Reginald Harrison devotes a part of a clinical lecture to a consideration of the uses of certain drugs in urinary disorders.

The power of quinine in connection with operations on the urinary organs has long been recognized, and there can be little doubt that this is directly associated with the fact that it is so largely eliminated by the urine.

Dr. Palmer, of Louisville, Ky., found that he could so sterilize the urine by the administration of boracic acid in ten-grain doses as to prevent the occurrence of urethral fever after such operations on the urethra as internal urethrotomy. The power of sterilizing the urine so as to render it innocuous when placed under conditions where otherwise it would be liable to generate septic influences is not limited to boracic acid and quinine. Hypophosphate of soda in half-drachm doses, in some purulent affections of the urinary organs may owe its beneficial effects to its influence as a bactericide.

Dr. Harrison has used pichi during four years in the form of a fluid extract, in drachm doses of the latter, with considerable benefit. In renal colic and the passing of calculi through the kidneys and along the ureters, attended with hæmaturia; though not exercising any solvent power, it seems by its action on the tissues in some way to favor the escape of the stone and thus suppress bleeding; it has been found useful also in the hæmorrhage which frequently accompanies cancer of the bladder. The sedative action of the drug on the mucous membrane of the bladder has proved beneficial in many instances of irritability connected with a large prostate. After the bladder has been properly cleansed by irrigation and disinfected, it has been frequently found that the calls to urinate were far less urgent when the pichi was being used.

Acting somewhat similarly, though less astringent in its properties, and, therefore, of less value when there is hæmorrhage, is an extract prepared from the berries and fruit of the saw palmetto (Serenoa serrulata); it seems to act something like pareira and is a good substitute for it. Of the chemical products, saccharin, in

half-grain doses, is useful in preventing the ammoniacal change in the urine in cases of cystitis. Where the mucous membrane of the bladder throws off large quantities of mucus and the urine undergoes rapid ammoniacal decomposition, the urine may become healthy and acid under the use of saccharin, and on discontinuing the drug the urine will speedily return to its original condition. Hence, it may be found useful in readily providing against conditions which cannot be radically altered. Dr. Thomas Stephenson and Dr. Woolridge have shown that saccharin may be taken for a considerable period without interfering with the digestive or other functions of the body.

Another chemical product is borocitrate of magnesia, prepared by dissolving a natural borate of magnesia, found at Strassfurt, in citric acid. It forms a white powder with a sourish taste, and is given in teaspoonful doses in a tumbler of warm water two or three times a day. Its employment has been advocated by Dr. Kochler, in cases of uric acid calculi and gravel. The discharge of these bodies, whose presence has previously been suspected, has frequently taken place after the use of this salt. It may be, all it does is to secure that the individual shall take at stated times more fluid than perhaps he would otherwise do, an important point, upon which Sir William Roberts has laid stress. Dr. Harrison is disposed to think that it does more than thus induce a person to flush his kidneys with a bland fluid by no means disagreeable to take, and that it is capable of modifying or altering the crystalline form in which uric acid is discharged, and of exercising a solvent power on some kinds of urate stones.—*The Med. Press*, No. 2671, 1890.

IMPORTANT INCOMPATIBLES.

Acacia (gum) with alcohol, ether, iron, lead water, mineral acids, borax and ethereal tinctures.*

Acids (in general) with alkalies and weak salts of other acids, as the bromides, chlorides and iodides.

Arsenic with tannic acid, salts and oxide of iron, lime and magnesia.

Bitter infusions and tinctures with salts of iron and lead.

Bromides with acids, acid salts or alkalies.

Bismuth subnitrate with subchloride of mercury, sulphur and tannin.

Calomel with alkalies, mineral acids, lime water, metallic acids and potassium iodide.

Carbonates with acids and acid salts.

Camphor with water.

Chlorides with silver salts, lead salts and hydrogen peroxide.

Chloroform (except in very small proportion) with water.

Corrosive sublimate with alkalies, lime water, salts of iron and lead, iodide of potassium, albumen, gelatine and vegetable astringents. It is, however, sometimes combined with the chloride of iron, arsenious acid or potassium iodide.

Chloral hydrate with alkalies, ammonium and mercury compounds, potassium bromide and alcohol.

Digitalis with iron and preparations containing tannic acid.

Hydrogen peroxide with vegetable tinctures, alkaline citrates and tartrates, ferric salts, hydrocyanic acid, sulphates, chlorides and nitrates.

Iron (salts) with anything containing tannic acid, tincture of the chloride of iron with alkalies, carbonates, mucilages and preparations containing tannic acid.

Iodine with ammonia,* alkalies, carbonates,* chloral, metallic salts and starch.*

Lead acetate with acacia, hydrochloric acid, sulphuric acid and sulphates, ammonium chloride, carbonates, lime water, iodine, potassium iodide, tannin.

Mucilage with acids, iron salts and alcohol.

Oxidizing agents, as chromic acid, potassium nitrate, chlorate and permanganate, nitric and nitro-hydrochloric acids should not be prescribed with oxidizable substances, as glycerine, sugar and other alcohols, oils, ethers, turpentine, sulphur and sulphides, phosphorus or dry organic substances.

Potassium iodide with all strong acids and acid salts, alkaloids, iron, lead and mercury salts, potassium chlorate, chlorine water and silver nitrate.

Potassium permanganate with ammonium salts, alcohol, ethereal oils, organic substances and glycerine.

Salicylic acid with iron compounds, potassium iodide and lime water.*

Sodium bicarbonate with acids, acid salts, tannic acid, alkaloids and metallic salts.

Sodium bromide with acids (mineral) chlorine water and mercury compounds.

Silver nitrate with acids, except nitric, alkalies, carbonates, iodides, bromides and sulphur.

Spirits of nitrous ether with sulphate of iron, tincture of guaiacum and most carbonates.

Tinctures of gums or resins with water.

Vegetable preparations containing tannic acid with salts of iron or lead.

*Those marked with the asterisk are sometimes prescribed in small quantities.—[Complied by C. C. Sherrard, Ph. C., from various sources.—*The New Idea.*

ON THE PREVENTION OF SHOCK DURING AND AFTER OPERATIONS.

Dr. Stephen Smith, in a paper upon this subject (*Med. News*, October, 1890) alludes to the fact that notwithstanding the great improvements in the treatment of wounds, the mortality from operations due to primary and secondary shock has not diminished, if, indeed, it has not increased. This is ascribed to more prolonged operations, nausea from anæsthetic, and the chilling dressings now applied. In the preanæsthetic days, rapidity of operation was the standard of perfection, and

everything was sacrificed to that end. The tendency now has been to go into the other extreme, with the result that primary shock has diminished, but that secondary shock has increased. At the American Surgical Association in 1888, this subject was fully discussed, the following preventive means being proposed: "Wait for reaction; calm the patient by a cheerful word; give stimulants before the anæsthetic; make anæsthesia short; operate as rapidly as practicable; dress quickly; avoid chilling the patient. After the operation apply dry heat; give liquid nourishment, with stimulants and laudanum, by the rectum; inject brandy subcutaneously; by the mouth give aromatic spirit of ammonia, and also black coffee and brandy; secure quiet, a horizontal position, and sleep; assure the patient that all is over and doing well." These precautions are such as would naturally suggest themselves, and in spite of them secondary shock is very liable to occur. Dr. Smith says that, fully realizing the danger of shock in many modern operations, he has been accustomed, when possible, to prepare his patients by stimulation to the extent of semi intoxication, and with excellent results. His method is as follows: "Give the stimulant in hot milk, beginning from eight to ten hours before the operation. Such quantities are given, and so frequently as to secure a state of happy indifference to the operation on the part of the patient. If the operation is to be at three o'clock in the afternoon, I give directions to commence at six or eight o'clock in the morning. I prefer whisky to brandy, owing to its slow and persistent operation over a much longer period. If the patient is not accustomed to the habitual use of stimulants I order an ounce of whisky every two hours in half a pint of hot milk. If at twelve o'clock, or even at ten, sufficient progress has not been made to render it quite certain that semi-intoxication will be secured at the appointed time, I give an ounce of whiskey in milk every hour during the remaining time. When the requisite effect has been obtained the stimulation should be discontinued. In the case of habitual drinkers I have given two ounces every hour. It is importent to give the stimulant in hot milk, which will furnish a large supply of easily-digested and readily assimilated food, in a form most useful to sustain the vital energies during the critical period of a severe operation, or during a necessarily protracted operation." These patients have suffused eyes, a flushed skin, a slow, feeble pulse, and complete indifference to the operation. They are kept warmly covered when on the table and the anæsthestic is directed to be suspended as frequently as possible. He remarkes, in opposition to the prevailing opinion, that these patients come under the influence of ether very quickly, and that only a small quantity is required. In addition to the warm clothing he advises that the wound be douched with hot water, containing the disinfactant, by which he means a temperature of 145° to 150° F., the hand being a sufficiently good test. The water must not be allowed to remain in contact with the tissues, but be used as a douche only, that is dashed into the wound from a pitcher so as to penetrate every recess. The wound surface turns a dull-gray color, all oozing of blood is arrested and this arrest is permanent, secondary bleeding not occurring. The dressings, consisting of materials retentive of heat, are then applied. Dr. Smith says that during the past ten years in which he has pursued this method, shock as an after-complication has never occurred.—*Occid. Med. Times.*

THE DEADLY BANDAGE.

How often is this most useful device improperly used? The records of the courts contain many unhappy accounts in cases in which the bandage has been charged with doing great damage. That it is capable of doing great damage, when improperly applied, every one knows; but that it is to blame for all with which it has been charged is very doubtful.

We were pleased to learn that the Ohio courts had lately decided a case in the doctor's favor, in which a bandage was said to have been so tigntly applied that an arm was lost.

When gangrene appears in a limb, making amputation necessary, it is a favorite plan with certain lawyers to try to make a jury believe that the bandage and the doctor who applied it are to blame, and that the plaintiff be rewarded with the doctor's money for his sufferings and the loss of his limbs.

Such lawyers lay great stress on the tight bandage, because they find in it an easy way to rattle and hoodwink medical experts, who will readily admit that a tight bandage may cause gangrene. Then it is a simple matter to make it appear that the case was one of gangrene, and the jury learn to associate the two and overlook the fact that clots in the blood vessels may also cause it. Some one has said that without medical experts there would be no suits for malpractice. This is an axiom which it would be well to remember in court whenever the deadly bandage appears in the case. The expert should then either withdraw or else assure the court that other things—clots, blood vessels, swollen lymph spaces, etc.,—are more likely to cause gangrene than the tight bandaging. It has been our lot to testify in sundry cases in which the tight bandage has figured, and we have not failed to notice that it always makes a strong impression on a jury. They can see in it a means by which a powerful constricting force may be applied, and they can see the dead and blackened limb below it; but it is hard for them to appreciate the other forces which generally operate to cause the loss of a limb which a surgeon has made an effort to save.

The expert ought then to have in mind the axiom before quoted, and put an end to all sophistry by seeing that all the facts which may operate to cause gangrene are properly set forth and impressed upon the court and the jury.—*Detroit Emerg. Hosp. Reports.*

ACCIDENTS WITH COCAINE AND PRECAUTIONS.

Dr. Delbose has published a statistical and clinical report on the accidents produced by this substance. He collected the histories published of accidents, from which he has been able to establish that up to the present time, only five deaths have occurred after the use of cocaine. This proportion would evidently go against the method if only the bare facts be accepted without interpreting them. From the various observations published, it would appear that death resulted from the enormous doses that were administered, varying from about eleven grains to double that quantity. According to Dr. Delbose, cocaine may be employed at the maximum dose of three grains, although he would not advise such a dose ordinarily, as beyond that quantity serious accidents occur.

To avoid rapidity of absorption, solutions too concentrated should never be employed. A 2% solution is sufficiently strong. It is not necessary in order to obtain anæsthesia to push the needle into the muscles or the subcutaneous cellular tissue, but into the thickness of the dermis. In spite of all precautions accidents may occur, and for them nitrate of amyl, injections of ether and caffeine are indicated.

Dr. Isidor Gluck has had occasion to use cocaine frequently in diseases of the eye, ear, nose and throat, and seeing at times most alarming effects from its use, came to have a certain dread of it.

It is when used in the treatment of the nose and throat, and when used hypodermically, that cocaine produces most alarming symptoms. Though employed in strength varying from 4% to 20%, sometimes the weakest solutions will produce the toxic effect in one susceptible. He now uses the following solution:

℞ Phenol, - - - - - gtt ii.
Aquæ destillat, - - - - ʒ i.
Shake until solution is perfect, then add,
Cocaine hydrochlorate, - - grs. x.

This formula has been in use for more than a year, and since using, no toxic effects of the drug have had to be treated. It has been used in any quantity in any part of the nose or throat, without the least fear of harmful consequences. Phenol is itself a local anæsthetic, and is supposed to prevent absorption of the cocaine by forming a very superficial eschar, and thus its toxic action is avoided. Further, the phenol prevents the congestive reaction, prevents the decomposition of the solution, and renders it aseptic.

Professor Wollfler points out that the causes in which unpleasant results have followed the injection of cocaine, are chiefly those in which the drug has been employed about the head. It seems that it is more dangerous when injected in proximity to the brain. While one may use 16 minims of a 5% solution in all other parts of the body, for injections about the head the same amount of a 2% solution is sufficient.—*Boston Med. and Surg. Journal.*

HERMAPHRODITISM.

Dr. C. W. Fitch, writing to the *N. Y. Med. Jour.*, describes a most remarkable case of hermaphroditism:

"The following case was brought to my notice by the commandant of police at San Salvador, Salvador, C. A., while I was in charge of the sanitary service of said Government. As it is a unique case, I should like to have it reported, with a view of ascertaining whether a similar case has ever been seen: J. H., a house servant of masculine features and movements, æt. 28 years, height five feet seven inches, weight one hundred and thirty-nine pounds, was arrested by the police for violation of the law governing prostitution, which compels prostitutes to register with the Direction-General of Police and pass a weekly examination by a surgeon detailed for that purpose. On examination, both female and male organs of generation were found in a remarkably well-developed condition. The labia majora were of normal size, but flattened on their anterior surface. The labia minora and the hymen were absent. The vagina was spacious, four inches and a quarter long anteriorly and six inches posteriorly. The os uteri was torn on the left side. There was profuse leucorrhœa. Seven years before, she had given birth to a normal female infant. In place of the clitoris there was a penis which when in erection measured five inches and a quarter long by three inches and five-eighths in circumference. The glans penis and the urethra were perfectly formed. The scrotum, which was two inches and an eighth long, contained two testicles about an inch in length and two inches and a half in circumference. The mons Veneris was sparsely covered with short, straight, black hair. Both sets of organs were perfect in their functions, semen being ejected from the penis and the ovaries being capable of producing eggs. Scanty menstruation occurred every three weeks, and lasted but two days. Sexual gratification was said to be equally distributed between the two sets of organs.

"Up to about seven years before, masculine clothes had been worn, but when pregnancy became apparent the local authorities compelled a change to female attire."

THE "KREUTZER SONATA" AND RUSSIAN MORALITY.

A good deal of the disgust excited by Tolstoi's "Kreutzer Sonata" would, no doubt, have been saved were the readers familiar with the state of affairs in Russia. It is a fair inference that the author could not have written such a book unless the conditions in which he lived were very different from anything to be found in America. A writer in the *Fortnightly Review* gives a glimpse of Russian life which goes far toward explaining the *raison d'etre* of Tolstoi's book. We are forcibly reminded that the Slav is as yet an undeveloped member of the Aryan family; and the degree of truth in this statement may be estimated by tracing

back the history of any sister race until the same condition is found. Indeed, the limits of history will be reached, in some cases, before such a degree of brutish sensuality is found to prevail. It has been said that in the middle ages a condition of universal priapism existed; but we have even here the evidences of a contrary sentiment prevailing, in the rise of chivalry, which carried the idea of personal purity to a height rarely equalled in modern times. The fierce Viking shut out women altogether from his cities. The Syro-Greek, in the groves of Antioch, invested his sensuality with a poetic grace that still survives in history. Chastity characterized the German on his first appearance upon the world's stage. The debauchery of the Roman Empire was unparalleled; but what magnificent achievements of that race preceded and led up to it! The race that built up the most stupendous political fabric the world has ever seen was as terrible in its excesses as in its battles. Celtic immorality is a modern development; and among the Gaelic population of Scotland, Ireland and Wales, chastity is the rule, with rare exceptions. But to day, in Russia, Pachmann says that "district courts do not look upon adultery as a serious violation of conjugal rights." Lanin speaks of the "abyss that separates Russian notions of morality and decency from those that prevail in the West." A parish priest, writing in *Graschdanin*, says: "All their social relations are permeated with coarse, cruel, brutal egotism." So that Tolstoi's book, necessarily a sharpened dart, hurled with ful strength, may serve to pierce the tough Russian cuticle and arouse the sensation of conscious guilt. —*Times and Reg.*

THE ADMINISTRATION OF MERCURY TO SYPHILITIC CHILDREN.

Infants who are born syphilitic, or who contract the disease shortly after birth, improve so wonderfully in many instances under the use of mercury, that the following note from the *Revue General de Clinique et de Therapeutique* concerning this subject is of interest:

When the child is from five to six weeks of age, Eloy recommends that 5 to 20 drops of Van Swieten's liquid shall be given each day in milk. (Van Swieten's liquid consists of a solution made by the addition of 1 part of bichloride of mercury to 100 parts of alcohol and 900 parts of distilled water.) At the same time that this liquid is given internally, it is advisable to use inunctions of murcurial ointment, or, better still, to employ mercurial ointment diluted by lanolin, equal parts. After this ointment has been used for two or three days, it is best to administer a hot bath. Wiederhofer, of Vienna, considers that red precipitate in the proportion of 1 part to 100 parts of lanolin is even better than ordinary mercurial ointments for inunctions. Baths of corrosive sublimate are particularly valuable, the patient being immersed every third day for a varying length of time, according to the effect of the drug upon the general system. The bath is prepared by adding three grains of corrosive sublimate and fifteen grains of chloride of ammonium to one-half pint of distilled water. This is poured into a wooden or earthenware bath tub just before the child is immersed in the warm water, which has already been placed there. When the child is older, that is six or seven months of age, the following prescription may be administered:

℞	Biniodide of mercury, . .	$1\frac{1}{2}$ grains.
	Iodide of sodium,	
	Distilled water, . .	aa 1 drachm.
	Syrup of orange, . . .	6 ounces.

Of this give $\frac{1}{2}$ a coffee-spoonful to a child of a year, and 5 coffee-spoonfuls to a child of from five to eight years. In other instances calomel and white sugar may be given, $\frac{1}{8}$ of a grain of mercury being used for each dose. Sometimes the protiodide of mercury may be given in the same quantity in place of the calomel, and it is particularly useful in combination with the saccharated carbonate of iron in the dose of $\frac{1}{2}$ grain, enough white sugar being added to give the powder proper bulk.—*Med. News.*

Intestinal Obstruction.—Jessett (*Med. Press and Circular*) thus sums up a valuable article:

1. Obstruction of the intestines, the result of constricting bands or volvulus, are always met with either in the small intestine or the sigmoid flexure.

2. The most common cause of bands are old peritonitis, local or general, Meckel's or other diverticula may be the cause of constriction of the bowel by snaring or twisting.

3. The predisposing cause of volvulus consists in elongation of certain segments of the intestine, abnormal length of the mesentery, adhesions, or unequal peristaltic action.

4. The higher in the intestine the obstruction the more severe usually are the symptoms.

5. All cases of obstruction should be treated by early abdominal section, and if possible reduction of the constricted portion of the intestine by dividing of constricting bands or untwisting of volvulus, that is if the gentle insufflation of hydrogen gas fails to effect reduction.

6. In all cases where the intestine is very distended, it should be freely incised and its contents evacuated.

7. In all cases in which the constriction is irreducible lateral anastomoses by approximation discs should be practiced so as to exclude permanently the seat of obstruction from active fæcal circulation.

8. In cases where gangrene has taken place in the loop of constricted intestine, it should be excised, and the portion of intestine above and below the seat of constriction should be united by lateral anastomoses by approximation plates, the divided ends being invaginated into themselves.

9. All bands and diverticula should be removed, when practicable, at the time of the operation; in the

case of volvulus, if the mesentery is abnormally long it should be shortened.

10. That enterostomy, or the formation of an artificial anus, should never be performed unless it is found to be absolutely impracticable to re establish the continuity of the intestinal canal by dividing the constricting bands by enterorrhaphy or by means of lateral apposition as described.

Spermatozoa in the Urine of Women.—The Paris correspondent of the *Pharmaceutical Era*, Oct. 1, 1890, says that a delicate point of ethics was recently raised in Bordeaux. A pharmacist of the place, having been requested to analyze a woman's urine, found it on microscopical examination to contain quite a number of spermatozoa. Feeling doubtful as to whether he should mention the fact in his report, he asked Prof. P. Carles, of the Bordeaux School of Pharmacy, for his opinion on the subject. The professor replied that, not long since, he found himself in just the same predicament. A gentleman of some standing in society, who was in the habit of having his urine occasionally examined, one day sent a specimen of his wife's water, with a request that it be analyzed. The microscope having shown the presence of spermatozoa in an other wise normal urine, Mr. Carles asked himself whether the husband, aware of the microscope's power, was not trying to verify some dark suspicions. Although such hardly seemed to be the case, the professor concluded to keep silent on his discovery. And since then whenever females' urines are presented, either described as such, or identified from special histological constituents, he has made it a rule to omit in his report all mention of any spermatozoa that may have been found. Their presence is only noted, confidentially, when the report is to be handed personally to the physician. Of course in a legal case the same course would have to be followed. The writer of the letter adds that it may be of some interest here to remark that some years since a like instance occurred in Brooklyn, N. Y. Two well known physicians attending the young unmarried daughter of one of the "first families" there, were one day taken aback by the discovery of swarms of tell tale microzoa where they had no business to be. After consultation, spermatozoa not being a morbid symptom in female urine, they wisely came to the same conclusion as the French professor, and kept their find to themselves.—*Med. and Surg. Rep.*

Examination of the Sputum for Tubercle Bacilli.—Kuhne, of Wiesbaden (*Centr. f. Bakt. und Parasitenk*), after referring to the fallacies and difficulties with which the search for tubercle bacilli in sputum from phthisical patients is surrounded, describes a new method of staining the bacilli. When it is difficult to spread out the sputum on a cover glass he uses a concentrated solution of borax, to which at least an equal quantity of sputum is added. The mixture is shaken up in a suitable glass, or is worked up in a mortar, after which it is easily spread in a thin layer over the cover glass. Nummular sputa from cavities may be broken down by a watery solution of carbonate of ammonia; this has the advantage that it is partially volatized as soon as the cover glass is heated, and what remains is broken up by the action of the acid. An equable layer on the cover glass being obtained, the albumen is coagulated by careful heating over a flame, after which the specimen is stained in Ziehl's fuchsin solution for five minutes, the color is completely removed with a 30% solution of nitric or sulphuric acid, and the specimens are washed in water and dried. In order to obtain a contrast stain, two or three drops of a concentrated solution of picric acid in aniline oil may be added to a watch glass containing pure aniline oil; a drop of this, placed on the slide before the cover glass is lowered into position, gives a sufficient yellow contrast stain to cause the red tubercle bacilli to stand out very prominently. They may be examined with a magnifying power of x60 to x100, and where they are in great number, as is the rule in "cavernous" sputa, they appear under still weaker magnifying power as particles of red dust on a yellow ground. To make a permanent preparation, Kuhne recommends that the aniline oil be driven off by means of his hand blower, and that the specimen be mounted in Canada balsam. By this method the tubercle bacilli only are stained.—*Brit. Med. Jour.*

The Treatment of Enlarged Bursæ and Ganglia.—Mr. Bond states, in the June, 1890, number of the *Practitioner*, that he is strongly in favor of the treatment of enlarged bursæ in the neighborhood of large joints by the radical method of excision of the whole or a large part of the cyst-wall. In dealing with these swellings in the popliteal space, the incision must be made well down to the cyst wall before beginning any dissection; if this be done, and the cyst well defined while tense and before it is opened, it can be isolated without difficulty. It is then best to lay it open, and ascertain from within what extensions and communications it has; these must be dealt with, and then as much of the cyst-wall removed as possible. In dressing the wound, pressure should be applied with wool dressing, and the limb bandaged in a semi-flexed position, so that the skin and soft parts fall together, and a tightly-stretched scar is avoided. The same method may be extended to the enlarged bursæ over the olecranon and patella. The treatment of the swellings in the sheaths of the tendons in relation to the wrist-joint is next discussed. Those simple ganglia which are too large to rupture, are best treated by excision; an incision is made over the swelling, which is isolated as far as possible; it is then laid open and its prolongations defined; as much of the cyst-wall as can be isolated is then cut away, and the posterior portion lying over the wrist-joint is left.

As a rule, the wound heals by first intention without any adhesion of the tendons. In cases of compound ganglia, the operation is sometimes very complicated, the tendons being studded over with a velvety mem brane and vascular fringes, like the lining membrane of the cyst-walls. In these cases the tendons must be picked up separately and systematically cleaned one by one; when this is done, the wound should be stitched up, and, as a rule, good movement is obtained in a short time.—*London Med. Rec.*

Lard in Stychnine Poisoning.—In the *North Carolina Med. Jour.* for September, Dr. W. H. Cobb, jr., records an interesting case of strychnine poisoning. The patient was a colored woman æt. 42 years, who whilst suffering from what she called "inward fever" had taken two capsules which she supposed to contain quinine, but which actually contained strychnine. After taking them she busied herself about breakfast, and, after working for some time, she says she heard them "bust" in her stomach. At 7.30 the family sat down to breakfast, when, just as she was about to drink some coffee, she was seized with a tetanic spasm. Her husband, finding that she had taken the strychnine capsules, immediately began administering lard to her until she had swallowed about one pint of it. The doctor arrived some two hours after the poison was taken, and at once administered morphine, gr.$\frac{1}{4}$, and atropine, gr.$^1/_{200}$, to control the painful spasms; this was followed by emetics of ipecacuanha and warm salt and water, but without result; later on, however, tickling the fauces induced emesis, when she vomited up about a pint of lard. She did not vomit again, though renewed efforts were made to make her do so, but after another dose of morphine and atropine the spasms abated, and she made a good recovery. Dr. Cobb attributes the favourable result partly to the fact that the capsules were about 16 months old, and, therefore, took some time to dissolve, and partly to the incorporation of the poison with the lard, and its consequent non-absorption. The failure of the emetics to produce vomiting he ascribes to the fact that the stomach was lined with a layer of lard.—*Br. Med. Jour.*

Healing of a Cold Abscess by Iodoform Injection.—Very rapid healing of a large tubercular abscess, due to caries of the ribs, under treatment by iodoform injections, is reported by Kerschner (*Prag. med. Woch.*, No. 28. 1890). For a year the patient had complained of pain in the right pectoral muscle, and after six months swelling was noticed, which gradually increased until it involved the greater portion of the right side of the chest.

From the history of the case, it was evident that this abscess was due to caries of the three upper ribs and the sternum, and to tubercular ulceration of the sterno-costal joints. The patient refused to consent to radical operation, therefore incision was made into the abscess, a pint and a half of pus was evacuated, and the cavity was treated by injecting an ounce and a half of a solution made of iodoform, 10 parts, glycerine, 50 parts, and water, 100 parts. This injection was repeated twice. In two weeks the abscess was entirely healed. The treatment was conducted throughout under the most rigid antiseptic precautions.

Lately it has been much more common to use olive oil as a solvent, or, at least, as a suspending menstruum for iodoform. In this relation, it is interesting to note that Klingemann (*Centralblatt f. Chir.*, August 9, 1890) reports a series of observations to determine the solubility of iodoform in olive oil. He finds that at the most the oil will not dissolve more than 3% of iodoform. From this, it follows that the 10% and 20% solutions, so frequently advised and used contain the greater portion of the drug in suspension.—*Am. J. Med. Sci.*

The Connection Between Disorders of the Genital System and Skin Diseases.—This has been accepted in the case of acne, of acute circumscribed cutaneous œdema, and sometimes in eczema, but scarcely ever has the association been more fully worked out than in the example of chronic urticaria by Dr. Frank, of Prague. In a woman, æt. 28, unmarried, urticaria and disorders of the sexual system commenced simultaneously at the age of 25. The symptoms pointed to chronic oophoritis and salpingitis, and the urticaria burst out with greatest intensity at the menstrual periods. The ovaries were completely removed, and the patient made an excellent recovery. The urticaria at once ceased and did not recur. She gained flesh, and all the local symptoms referable to the sexual apparatus vanished. Dr. Frank observes: "It is a well known fact that during female sexual life the normal genital functions, as well as the disturbances to which these are liable, exert a notable influence on the development and of the entire nervous system. As a result of long-continued chronic sexual disorders, from the persistent pain and emaciation, an altered irritability of the nerves, particularly of those distributed to the vessels, arises. Further, from the circumstance that a reciprocity between the genital system and the skin is easily observed in various physiological and pathological processes, the conclusion is established that the cutaneous nerves are implicated in these disorders.—*Zeitschrift f. Heilkunde—Jour. Am. Med. Ass'n.*

Low Railroad Rates for the Holidays.—The Iron Mountain Route greets all its friends with a wish for the merriest Christmas and the happiest New Year, and takes pleasure in offering greatly reduced round trip rates to enable them to visit their friends at any point on this road, not over 200 miles distant. Tickets are on sale December 24, 25 and 31, and January 1, good to return until January 10. For tickets and all further information, apply to your local ticket agent.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service.

FOR THE TWO WEEKS ENDED DECEMBER 6, 1890.

Fessenden, C. S. D., Surgeon. Leave of absence extended 7 days. Dec. 4, 1890.

Bailhache, P. H., Surgeon. Granted leave of absence for 20 days. Nov. 28, 1890.

Hutton, W. H. H., Surgeon. To proceed to Solomons Island, Md., on special duty. Nov. 29, 1890.

Sawtelle, H. W., Surgeon. Granted leave of absence for ten days. Dec. 2, 1890.

Peckham, C. T., P. A. Surgeon. Granted leave of absence of 10 days. Dec. 1, 1890.

Hussey, S. H., Ass't Surgeon. When relieved to proceed to New Orleans, La., for duty. Nov. 24, 1890.

Groenevelt, J. F., Ass't Surgeon. When relieved to rejoin station. Nov. 24, 1890.

Cofer, L. E., Ass't Surgeon. Ordered to temporary duty at Boston, Mass. Nov. 24, 1890.

The Souring of Milk in Thunder Storms has just received a scientific explanation at the hands of an Italian savant, Professor Tolomei. He has found that the passage of an electric current directly through milk, so far from souring it, actually keeps it sweet, so that it does not turn until the sixth to the ninth day; when, however, an electric current is passed over the surface of milk it soon becomes sour, and this the Professor attributes to the generation of ozone, since the souring is more rapid when the current passes silently than when it is discharged explosively, more ozone being generated by the former than by the latter method. The fact that the souring of milk can be retarded by so simple a procedure as the passage of an electric current, may prove of practical value and offer a safer way of preserving milk than by the use of antiseptics.—*Northwestern Lancet.*

For Pleurodynia.—For quick and lasting relief in pleurodynia, J. Adolphus, M.D. (*Medical Age*), praises gelsemium and ammonium muriate. He gives the first in the form of the tincture, ten drops every hour; or, if the latter medicine is employed, twenty to thirty grains are administered every four to six hours.—*Can. Lancet.*

Low Railroad Rates for the Holidays.—The Missouri Pacific Railway greets all its friends with a wish for the Merriest Christmas and the Happiest New Year, and takes pleasure in offering greatly reduced round trip rates to enable them to visit their friends at any point on this road, not over 200 miles distance. Tickets are on sale December 24, 25 and 31, and January 1, good to return until January 10. For tickets and all further information, apply to your local ticket agent.

USEFUL FORMULÆ.

The following formulæ are taken from *Notes on New Remedies:*

For Chronic Rhinitis, Pharyngitis and Stomatitis.—a) Profuse secretion:

℞ Potassii Sozoiodol., - - - 10.0.
Talcum, - - - - - 10,0.

b) To increase secretion:

℞ Zinc. Sozoiodol., - - - 2,0 to 3,0.
Talc. venet, - - - - 20,0.
S: Use by insufflation.

For Nasal Douches.—

℞ Zinc. Sozoiodol, - - - - 5,0.
Aq. destillat, - - - - 100,0.
S: Douche.

For Ozœna.—

℞ Hydrarg. Sozoiodol, - - 1,0 to 2,0.
Talc. venet, - - - - 20,0.
S: Externally, by insufflation.

For Laryngeal and Nasal Syphilis.—

℞ Hydrarg. Sozoiodol, - - - 5,0.
Sacch. lactis, - - - - 12,0.
S: Use by insufflation.

Hair Tonic for Scalp Diseases.—

℞ Sodii Sozoiodol, - - - - 2,0.
Aq. destillat, - - - - 300,0.
Spir. Coloniens, - - - 20,0.
S: Use as a wash for the hair and scalp.

For Gonorrhœa.—

a) ℞ Zinc. Sozoiodol, - - - 1,5.
Aq. destillat, - - - 100,0.
Tinct. opii spl, - - - gtt. 20.

b) ℞ Sodii Sozoiodol, - - - 5,0.
Aq. destillat, - - - 100,0.
S: For injection three times daily.

For Vaginitis.—

℞ Sodii Sozoiodol, - - - 10,0.
Lanolini, - - - - - 100,0.
M. f. ungt. S: Use as a salve.

For Cervical Catarrh.—

℞ Sodii Sozoiodol, - - - 10,0.
Talc. venet, - - - - 20,0.
S: Use externally.

For Endometritis.—

℞ Zinc. Sozoiodol. - - - - 3,5.
Aq. destillat, - - - - 40,0.
Glycerini, - - - - 10,0.
S: Use externally.

ORIGINAL ARTICLES.

SOME OF THE DELUSIONS OF THE INSANE.

BY JOHN PRESTON, M.D., SAN ANTONIO, TEXAS.

Late First Assistant Physician to State Lunatic Asylum, Austin, Texas.

Read before the Austin District Medical Society, Sept. 25, 1890.

Living, as I have been, in close contact to, and in association with, that most defective and helpless class of our population—the insane—I have thought that a paper upon some of their peculiarities and delusions with a description of some marked cases would not be uninteresting to this learned body of medical men.

I have selected this subject however with many misgivings, for I am aware of the fact that it is considered one that is of little importance to the general practitioner, for the reason that the insane are separated from the sane population and aggregated and held in certain localities and institutions for their care and treatment. Here physicians are appointed for their supposed superior qualifications and experience, to take care of and treat them. They are required to abandon all other practice and to devote their whole time to this specialty. Therefore the general practitioner is little interested in this work because he has little of it. But I venture to mention to-day a few of the lordly gentlemen and royal ladies into whose august presence I have been daily ushered and whose varied and wonderful conversation I have been privileged to hear and required to listen to.

First of all I will introduce Col. C——. This gentleman is a tall, broad-shouldered, old man, with a massive head and long, gray beard, giving him the exact appearance of a patriarch of the olden time, and to all intents and purposes he is one. I will give you his own account of himself:

"I have no knowledge of when my existence first began. I have been born, dead and resurrected 187 times. My age is coequal with that of the planets. Adam and Eve were well known to me, and I knew all men of prominence from Adam's time to the present day. Abraham, Isaac and Jacob were my playmates, and I regard Abraham as one of the finest specimens of mankind, mentally and physically, that the world has ever produced. I saw David kill Goliah. They fell out while herding cattle on the plains. Solomon was an old acqualntance of mine and was a most wonderful man. The Cæsars were my personal friends and companions, and we played as boys along the Appian way and walked the streets of Rome when she was ruler of the world.

"The last time I was born, the interesting occurrence of my birth took place in England, and, much to my mother's shame, I am an illegitimate child. My father, my mother's seducer, being Lord High Admiral Tyron, of the British Navy. My mother had me abducted and taken to the United States and buried in a drift of snow in Pennsylvania, where I was discovered and revived and afterwards brought up by Margaret Can. When a young man I was sent for by Mrs. Guelph, the present Queen of England, who introduced me to my mother in Osborne Castle. After parting with my mother, I was set upon by foot-pads, at her instigation, and in her presence, and kidnapped, and I next found myself in Australia. Thence I was sent on a slaver to Africa for a load of coons, and after many wanderings and adventures I escaped on an American man-of-war and returned to Philadelphia. Very soon I was sent for by Mrs. Guelph—Queen Vic.—to conduct an expedition to the North Pole in search of Sir John Franklin's remains. I successfully reached the North Pole and found Sir John's watch and the remains of his party—all were dead. All of my crew perished by reason of the extreme cold of these regions, and I escaped on a life-boat alone and went to Constantinople where I was received in royal style by the Sultan." I could not within the space allotted to this paper give an account of all that this wonderful adventurer saw in the countries visited by him. He gives a minute and graphic account of his adventures and perfect description of the appearance of the Arctic region.

Case II.—Prof. W——. The professor is a small man, æt. 50 years, and very self-important. He says he is the strongest, best and smartest man now living, and is the man elected of all others to begin the millennium on earth. He will live a thousand years and will rule the whole earth. This little man has his room full of manuscripts of his own composition, on various subjects, mostly poetry and religion. He is also a great artist and spends much of his time in drawing sketches of his friends about the asylum, and men of history. The professor enjoyed a fair education in his youth and is quite pedantic in his expressions and very critical of the language used by others in his presence. He can often be seen early in the morning walking about the grounds, delivering in an eloquent and exalted style, a Phillipic against some one who has incurred his disfavor. As he proceeds in his speech he grows very vociferous and makes the welkin ring with his oratory. And yet, even in the midst of one of his most brilliant conceptions or grandest flights of imagination, if requested to bring a bucket of water or the bread from the kitchen he proceeds in all calmness to carry out the order. Here is the professor's description of himself which, I must confess, far surpasses mine:

I am five feet-six inches in height,
And this is the attitude in which I delight;
A hundred and forty pounds is my avoirdupois,
And this is the size for life and its joys.

The taller or shorter that men are, than me,
The less of life's enjoyment they see;
And the fatter or leaner that men are than I,
The better for them, the sooner they die.

The professor is quite a ladies' man and often indulges his muse in their behalf. He is now engrossed in an epic poem on an eminent Brooklyn Divine, from whom he differs materially. It presents many racy passages, and surpasses in many places the sarcasm of Byron's English Bards and Scotch Reviewers.

Case III.—Gen. F——, the emperor of the earth. He imagines himself the only heir to the Bank of England, and that he is imprisoned by the Jews who are endeavoring to swindle him out of his estates. They claim that he also is a Jew, and base their assertion upon a "Chancre foundation." His prepuce being contracted from the effects of an old chancre and not from circumcision, as they claim. Making him a Jew on this slight evidence they profess to be his heirs and are enjoying his immense estates. So daily he accosts everyone whom he meets and tries to enlist their sympathies and efforts in his behalf to enable him to become reinstated in possession of his property. On Friday evenings the emperor may be observed in his magnificent uniform, decorated with all of his insignia of office, and a cocked hat on his head, attending the dances. He dances with much grace and great earnestness, and enjoys his temporary grandeur to the fullest extent. During the other days of the week he spends his time in sewing on buttons, and is much interested in the trade of a tailor, a great condescension on his part, still not unlike many so-called sane beings, who imagine they are born to greatness, and yet find themselves daily engaged in the ordinary pursuits of life.

Case IV.—Mrs. A., the queen of Masonry and the daughter of God, a tall, haughty woman, 50 years of age. She spends her time in writing, and often addresses a letter to the superintendent of the asylum, the governor or members of the legislature. In them she discusses various subjects, supposed to be before these honorable servants of the people, and states in most emphatic and unmistakable terms that if her views are not carried out, she will invoke the curses of heaven and hell upon their heads. And I believe her letters have sometimes had a good effect. She often speaks of what God, her father, tells her to do. She, too, is a poet of no mean distinction, and often indulges her muse. She and the professor are great friends, and may be seen during the afternoon sitting in the halls, engaged in a game of chess, in which both excel as players.

Case V.—John W. This negro was a servant of an army physician, who was stationed at one time at one of the forts of Texas.

He is a very pompous military man, and imagines he is in command of the asylum, which he regards as a fort. He can often be observed, with his flags, drilling imaginary troups about the grounds. He gives orders in a loud and commanding voice, and should a soldier make a mistake, he curses him and orders his sergeant to arrest him at once and put him in chains. He often discharges his doctors for not saving the lives of his soldiers, and none of the asylum doctors are at all times free from his invections, and yet even in the midst of his grandest military manœuvers, should one of the asylum officers request him to bring up his buggy, he will immediately comply and rush off on his errand.

John acts as office boy, and when visitors arrive he meets them with great politeness and conducts them to the parlor. Then he reports to the authorities and sees that the requests of his visitors are heeded. Jo n has great regard for ceremony, and the more stylish and well-dressed class of visitors receive at once his homage and most gracious attentions. When a fine city hack arrives, filled with such a precious load of humanity, he rushes wildly over the asylum until he finds one of his doctors, or other officers, to conduct them over the building.

I could describe many similar cases of mental aberration, with marked delusions, but time will not admit of it. I will only mention Mr. C., who is God, and Mr. D., who is Christ. These two gentlemen one day fell into a dispute over their personages. Mr. D. asserted that he was Christ, and Mr. C. told him he was a liar, that he (Mr. C.) was God, and he knew he wasn't Mr. D.'s father. With this they fell to fighting, and both came out with black eyes.

Mrs. S. is bewitched, and may be seen at any time brushes the witches off her person with a newspaper, and blowing them out of her mouth. She is also the owner of the asylum, and it is run at her expense. Her great trouble is to prevent the attendants from wearing her silk dresses and stealing her trunks of gold.

Mrs. G. is an Indian chief.

Mr. McC. is troubled with a live dog in his stomach, and can feel distinctly its claws and hair.

Mr. M. has a squirrel in his stomach, and can feel it gnaw on the end of his liver.

Mr. C. has no brains or intestines, and his back is "uncoupled." He, I believe, is the smartest man of them all. Like many sane men who imagine themselves to be very great. When observed closely, they too will be found without brains, with poor digestive organs, and joints all loose and uncoupled.

I have mentioned a few of the inmates of the asylum who labor under the most marked delusions. There are many similar cases who differ from them only in the extent of a diseased brain and disordered intellect. They are often bright, even brilliant in conversation, and quick at repartee. But it can be easily discovered that something is wrong. Their premises are assumed and are wrong. The balance wheel that regulates the machinery of their brains is out of place, and their thoughts go wandering at random all over the universe. These are chronic cases, all of them. They are incurable, and yet the question naturally arises, should our fellow beings, who are capable of enjoying much that there is in life and liberty, be kept locked within four strong walls and compelled to remain there for an indefinite period of existence, simply because they are a little annoying to some so-called sane people. I hold that our great State should, as she is able to do, afford the best means of caring for her defective population in

the best way. These people are entitled to some of the enjoyments of home life, and should, with proper attendance, enjoy the free air. They should be permitted—required, if necessary—to perform daily a certain amount of labor, for which they should in some way be remunerated, either pecuniarily or by certain privileges. Many could visit places of amusement and would enjoy them as much as the sane, and should have the benefit of music and other entertainments at the asylum.

But for all classes of the insane—from the first attack of acute mania to that most hopeless state, chronic dementia—the opprobrium of modern psychistry—there is nothing that tends to bring about a change in their disordered conditions so quickly and so certainly as the diversion produced by manual labor. Apropos to this subject, I will quote from the *Journal of Mental Sciences*: "Idleness is proverbially injurious alike to body and mind, and use is essential to both This apathy and pre-occupation at once manifest and aggravate the malady, and the great aim of treatment is to awaken the mind from its apathy, and to turn the thoughts into new and healthy channels. With this object, the patient is surrounded with whatever is likely to attract and interest. He is made to feel that he is among friends who care for him and wish to help him; and above all, he is induced to engage in some active employment, if possible, in the open air. By the attention which the occupation requires, and by the interest it excites, the man ceases to be self-centered and self-absorbed; the insane ideas which possessed him are replaced by normal thoughts and feelings, and there is gradually established the former familiar habit of taking an active interest and active share in the daily duties of life. Simultaneously sleep is promoted, the general health improves, and thus occupation becomes as welcome as it is beneficial."

The above views have been verified at the State Lunatic Asylum.

The patients who are engaged in work on the farm, in the garden and on the grounds, are freer from physical disease, and are the first to regain their mental equilibrium.

But under present conditions there is only opportunity for a limited number to be thus employed. The provisions for a sufficient number of attendants to assist and guard the patients are inadequate, and the consequence is, that a large majority of the inmates are, from necessity, kept within the walls, or daily mustered out to the airing grounds, to spend their whole time in listless idleness.

The want of individualized treatment is felt by all, and many, through neglect, sink into a state of chronic dementia, and become merely automatic machines, directed by the minds of others. The most pitiable sights observed in our institutions for the insane are those hopeless semblances of men and women, sitting in everlasting quietude along the walls of the spacious halls, with their heads bowed, and with faces indicative of an absolute intellectual blank.

To day, 75%, perhaps, of the inmates of the older asylums are in this sad state. And here the question may appropriately be asked, are those engaged in the management and treatment of the insane responsible for this condition, and I answer, in a measure, yes. They have not done all in their power to save their patients from this irrevocable fate, and yet I would not lay all the blame at their doors. The large numbers crowded into the asylums is another cause, and the mistaken economy of the people's representatives in the legislatures in failing to provide sufficient means for extra attendants, is another cause. There are others that I need not mention. When an insane man enters the asylum, he is at once forced into a ward where fifty other crazy men are kept confined. And should perchance a moment of cessation from his ravings occur, and a bright and encouraging ray of light enter the cavities of his darkened brain, enabling him to behold his surroundings in all of their hidiousness, what must be his feelings when he finds that, instead of being at home among friends, and surrounded by familiar faces and objects on which he has been accustomed to gaze, he beholds a body of frantic beings, acting without reason, and talking without sense. Is it a wonder that he begins to yell from fear and despair? And if the man does this, what of the poor woman? And then, what is often the treatment in many of the asylums? Instead of being met by a kind friend who will interest himself in his behalf, he is often cursed and commanded to "hush up his yelling." If this is unavailing, it is concluded that the patient is excited and should be restrained, or given a quieting draught, and this is often done to the extent of paralyzing his physical and mental powers. A few repetitions of similar means conquers all effort and breaks the spirit of the strongest, and so they gradually sink into the hopeless state of chronic dementia, never again to enjoy the light of reason.

What, then, is the most rational course to pursue with those who are just admitted into the asylum? Certainly, to use every means in our power to divert the sufferers' thoughts from their irregular channels. The patient's confidence once gained is a great help in this direction. We should gradually impress upon him the necessity of doing something. His muscles must be employed, and what brain he has, aided by ours and the attendants in charge, encourage and sympathize with him, and assure him of your eternal friendship. He soon discovers who is his friend, and soon learns to rely on those who tell him the truth. The insane are not so simple as they are given the credit of being, and can be talked to and reasoned with as rational beings, however irrational they may be. I will admit that all of this work and talk and trouble is very exhausting to those who give their charges their time, and they often leave the wards with a tired and exhausted feeling. I have often experienced a like effect myself. But it is a duty, nevertheless, and should be met with patience and nerve.

With this moral treatment I would not be understood

to discard all medicinal agents. These are needed when indicated, and should be used. Great as is the task of caring for the insane, one can slur over his work, and, a as time-server, get along in some way without much trouble. No superintendent can do all of the work alone. He must have intelligent and painstaking assistants who will aid him loyally in his work, or his result will prove but a failure of his administration.

THE STRUGGLE FOR EXISTENCE FROM A MEDICAL STANDPOINT.

BY DR. J. R. SUTTON, FRESNO, CAL.

Read before the Fresno County Medical Society, Dec. 2, 1890.

In observing the complex and conflicting forces of natural phenomena I believe there is a universal tendency to adopt the views of the optimist, in whose field of mental vision the roseate hues predominate, and who complacently sings with the poet

"All nature is but art unknown to thee,
All chance direction which thou canst not see,
All discord harmony not understood,
All partial evil universal good."

Believing that this optimistic tendency by fostering an undue sense of security, trust and confidence in the beneficent forces of nature may to some extent impair our efficiency as medical advisers as well as cause a relaxation of that vigilance and perseverance on the part of the general public in the enforcement of sanitary regulations so essential to our protection from the malignant forces of nature from which we are ever menaced is my excuse for presenting for your consideration some crude thoughts on a subject seemingly possessing so little practical interest.

The life history of all animate beings is a history of a struggle for existence that is carried on everywhere with unrelenting severity.

It would require an extensive museum to exhibit all the exquisite contrivances with which living creatures have been provided in order to torture and kill each other. Instead of a gland to secrete chloroform that might be used to cause painless death, they have teeth, tusks, fangs, claws, talons, beaks, horns, stings and malignant poisons in infinite variety and adaption for tearing, rending, crushing and torturing each other. Kill that you may live is the mandate of universal necessity.

And as it is to-day so it has been through the immeasurable past, until the earth's crust for miles in depth is filled with the fossil remains of innumerable species that have struggled with each other through geological periods and have finally perished.

Just as we had begun to congratulate ourselves on the signal victory we had achieved in conquering the elements, subduing the wild beasts and taming the savage instincts of our own species, inventive genius gave us the microscope, and as a matter of curiosity we commenced exploring the infinitesimal world, and to our surprise and consternation we found it swarming with innumerable species of living organism. And pushing our investigations and patiently studying their evolution, we finally discovered that certain species of these minute organisms (so extremely small that they might be conveyed on the tiny foot of a fly or the delicate lancet of a mosquito) constituted the chief enemies of human life, compared to which all other enemies sink into insignificance.

If we are shocked at the thought of twenty thousand people perishing annually in India through the agency of wild beasts, how must we feel when we realize that millions of human beings are annually sacrificed through the agency of a single species of those invisible assassins (with which earth, air and water are filled) that lie in wait for us at every turn.

In accepting these new factors in the etiology of disease we naturally find it necessary to revise some of our theories concerning pathology as well therapeutics. And we are beginning to inquire what this mysterious force called vis medicatrix naturæ really is. And we think of that strange phenomenon we observed in our physiological studies when watching the venous current under the microscope. The red blood corpuscles (forming the bulk of the current) coursing along in a steady, unbroken stream, the white corpuscles moving at an irregular speed—halting like watchful sentinels, darting here and there, changing their forms, throwing out processes, elongating into slender rods, and passing bodily through the walls of the vessel into the neighboring tissues.

No physiologist I believe has ever been bold enough to suggest (what now seems probable) that these strange amœboid cells are really intelligent entities, and constitute the main factor in our much-vaunted vis medicatrix naturæ.

And so we are gradually clearing away the rubbish and think we now catch a faint glimpse of daylight in pathology. Now we cannot have coagulation of lymph without the white corpuscles; organizable fluids are a thing of the past, the leucocytes substitute fibrine; the latter is a product of the former.

Wherever there is localized impairment of nutrition the result of invasion of noxious elements or mechanical injury, there the white corpuscles concentrate.

In the case of a foreign substance (a bullet for instance) lodged in the tissues, that and cannot be removed they do the next best thing—build a wall around it and it is safely encycted; if it is devitalized tissue they feast upon it and develop in new tissue replacing that which they consumed. If the offending substance be micro-organisms then a struggle ensues in which cell is pitted against cell in mortal combat, resulting either in the destruction or expulsion of the invader or the exhaustion and capitulation of the defenders.

In the light of these possible facts we must now re-

gard fever and other concomitant symptoms of disease as merely the heat and smoke of battle wherein opposing cells are engaged in a struggle for existence.

Taking this view of it must necessarily dampen somewhat our therapeutic zeal, and forcibly suggests the question as to whether in our efforts to combat disease we have (in military parlance) been simply shelling the woods and probably inflicting as much injury on friend as foe.

Prof. Huxley has compared the body to an army: "Of this army each cell is a soldier, an organ a brigade, the nervous system headquarters and field telegraphy, the alimentary and circulatory system the commissariat; losses are made good by recruits born in the camp, and the life of the individual is a campaign conducted successfully for a few years, but with certain defeat in the end."

In the light of all that is now known, cell antagonism —cell struggle—must be regarded as the gist of modern pathology; and inflammation, the standard process by which all pathological states are measured, can be explained on no other hypothesis.

Koch found the bacillus of anthrax and septicæmia in the mouse, enclosed in the white blood corpuscles. Another microscopist claims to have seen a white corpuscle chasing a microbe, catching and devouring it.

With the advent of this theory of microbean infection came numerous methods and devices for destroying them.

It is known that certain areas and organs of the body alone afford the suitable soil and conditions necessary to the propagation of the germs recognized as the causative agent in many diseases. And (as in the case of the exanthemata, one attack affords immunity from subsequent attacks presumably by exhausting the soil or changing its character in some way, and it was thought by occupying the premises in advance by the introduction of some benign species of germ capable of bringing about this change, a specific enemy might be thwarted.

And though there has been much patient and exhaustive research in this department (except in the case of small-pox),no very important results have been achieved. Chemistry has been exhausted in efforts to find some cunningly-devised poison that while not being harmful to the resident cells would destroy the interlopers.

Koch's bacillus of tuberculosis, being regarded as the most formidable and destructive, has been the subject of the greatest amount of experiment on the part of investigators, and though they have tried poisoning by chemicals, scalding with steam, baking with hot air and drowning with fluids, and finally one ingenious tactician suggested a change of base, and assaulting from the rear by means of gaseous enemata, and though this had the merit of being fundamental and was popular for a time, yet, like the other methods, it has failed, and the bacillus still holds the fort and comes up smiling after each assault.

In accordance with the known law of antagonism between different species (wherein each has its natural enemy that preys upon it) it was thought that a plan analagous to that of the fruit grower who imports the Australian Lady Bug to destroy the fruit pest might succeed. And many experiments have been carried out on this line, but so far without any practical results, though one enthusiastic experimenter announced some two years ago that he had discovered in the bacterium termo the Sullivan capable of knocking out this bacillary Kilrain, but requested a little more time to fully work out the problem, and as he has made no further announcement it is presumed that he is still working, and we are now impatiently awaiting the result of Koch's recent announcement that he has finally discovered the long-sought-for panacea, though it seems a little ominous that he too (like the champion of the bacterian Hercules) has requested more time in which to perfect his plans.

There is one hospital field where there has as yet (so far as I know) been no practical work done, and that is in regard to the question of soil, its chemical and other qualities that favor the propagation of disease germs.

This question of soil was suggested to me some years ago, when reading an account of some experiment in the horticultural department of Amherst college. It was observed that some peach trees in a certain part of the grounds, though apparently healthy, failed to mature their fruit, which would invariably wither and fall off. Examining the bark under the microscope they found it swarming with germs and by analyzing the soil around the roots and comparing the results with those obtained from examination of soil around healthy trees in another part of the grounds, they found that in the case of the unhealthy trees there was an absence of one of the salts of lime which was replaced by a salt of potassium, and by simply adding to the soil this particular salt of lime all the difficulty was removed, germs disappeared and the fruit matured without falling off.

Now, we all no doubt receive the germs of tuberculosis into our systems many times without developing the disease, and might it not be in the case of those who do develop the disease, that there might be some chemical or other constituent present or absent, which, if it could be removed or supplied, as the case might be, the results might be as favorable as in the cases of the peach trees referred to.

In dealing with the intricate questions of physiology, etiology, and pathology, one must needs feel discouraged at times. There are so many sources of error, and we are never quite sure of our facts. In collecting the material for our monument of truths we are constantly finding some truths that are inconsistent with some we have accepted, and hence we find it necessary to constantly revise and reconstruct our system of facts. And I often think of the boy in Missouri whose father, on his departure for town one morning, gave him instructions to go to a certain part of the farm and finish planting a patch of potatoes a part of which had been planted the day before; he gave him directions to drop them in the furrows so far apart and then cover them with the

plow. Through a mistake he got on to the ground that was planted the day previous, and after dropping several rows he proceded to cover them as directed, and in doing so brought up those previously planted, and when he reached the end of his row and looked back, to his great surprise he saw what he supposed was the potatoes he had just covered lying on the top of the ground, and so he proceeded to cover them again and in this case he uncovered those that he had just covered, and when he reached the end of the row the result was the same as it was before, and after repeating this operation several times with the same result he stopped and soliloquized, and he said to himself, "there is no devil if I will plant potatoes that won't stay planted," so he quit and went fishing.

And so I often feel when studying these complex and difficult problems (occasionally catching a faint glimpse of ultimate truth that like an ignis fatuus forever eludes our grasp) that it would be a relief to quit and go fishing.

In conclusion, I deem it worthy of mention (as some of you may have overlooked it) that one bold investigator announces the important discovery that the sting of the bee is an infallible antidote for rheumatism, and recites the history of one intractable case that had resisted all the ordinary remedies but yielded promptly and effectually after being stung by twenty-seven hundred bees.

One can easily imagine that if there was anything in the world that would make one forget the keenest twinge of rheumatic pain and decide instantly (without wasting any time meditating) the momentous question of to be or not to be, it would be to be sat down on all at one sitting,by a swarm of angry bees.

This would seem to be a clear case of similia similibus curantur, and is especially commended to homœopaths for further trial.

PHYSIOLOGY.

BY A. WETMORE, M.D., WATERLOO, ILL.

Read before the Southern Illinois Medical Association, Chester, November 21, 1890.

When a physician is called to a patient—if not a surgical case where diagnosis is more patent—almost the first thing he does after some such indifferent question as to "what is the matter?" is to feel the pulse. In what way does this act assist in diagnosis? The normal number of pulsations in health in an adult being from 68 to 78, any departure therefrom whether greater or less attracts attention, and the next step with the physician is an examination of the tongue to learn something about the secretion of the glands and mucous membranes, having in the meantime—by his hand coming in contact with the skin—determined what its secretion and temperature was—approximately—and whether it was necessary to use a thermometer to determine accurately the temperature of the body. Again, how do these things lead to a result? Have there been evacuations from the bowel? How often? When last? What was the color and consistency of the stool? Was there pain with it and where was that pain located? Was there urine passed? What was the quantity in the last 24 hours? What was its color? Was it clear? What were its chemical reactions? What was the effect of heat upon it? Was its passage painful or not? What was the character of the stream? Was the patient frequently impelled to make the effort at micturition? Did much or little pass each time? And again—if a female—do those natural periods the menses occur at regular intervals? Is there pain at that time? Is there any other discharge, not blood, from the vagina? In speaking of these different functions of organs in patients which are inquired into by the attending physician, is it not important beyond doubt, that a proper contrast can be drawn, and a correct conclusion reached by him of the proper remedy to apply and of the causes to be removed, that he fully acquaints himself with the normal functions of all the organs of the body, and is not physiology one of the physician's most important studies. Is not all else in medicine subordinate to it? Is not physiology the final conclusion of anatomy, natural philosophy and chemistry? Can a physician be said to solve a problem, in a logical manner, who fails to reach its conclusion? Is not the introduction, by our state law, into our public schools of the study a long step in the right direction. Will not this posting of the laity on this most important matter make us better physicians and strike a harder and better blow at proprietary medicines?

TRANSLATIONS.

FROM THE FRENCH AND GERMAN.

BY F. NEUHOFF, M.D., ST. LOUIS.

Dangers of Ergot and Ergotine after Confinement.

Since the introduction of antisepsis, the precepts of Pajot on the dangers of employment of ergotine after confinement are incomplete. The proper rule ought to be, to abstain from the use of ergot after labor even in the presence of the graver forms of hæmorrhage. Ergot and ergotine have become useless and dangerous.

Under the impression that the patient escapes acute infection from the materials which are retained in the uterus, she is exposed, ninety times in a hundred, to an attack of chronic metritis, which comes on seven, eight or even more months after confinement. Besides, the uterus remaining large and the patient getting up too soon, there may be induced troublesome prolapse.

After the delivery is completed, an intra-uterine injection should be given with all antiseptic precautions.

The clots of blood which are very abundant at the placental site are removed with the hand. The membranous debris is treated in the same manner. After this the uterus is washed with 10 or 15 liters of water, and after two days it has returned to its normal state.

The above described proceeding is as dangerous as the most grave surgical operation and should therefore be done only by the surgeon himself.—*Le Progres Med.*

Treatment of Fissure of the Anus.

Cauterize the fissure thoroughly with nitrate of silver, and then dress it several times a day with the following salve:

℞ Acidi boracic, 3 grammes (45 grs.)
Cocaini hydrochlor., 1 " (15 ")
Lanolin, - - 30 " (450 ")
M. Ft. unguent.—*L'Union Med.*

Salicin and Salicylates in Rheumatism.

Haig has found that rheumatics excrete more uric acid, while taking sodium salicylate, than while taking salicin. This explains the superiority of the salicylate over the salicin in the treatment of rheumatism. The alkalies produce an excretion of uric acid which is less marked. Though useful, they are less efficient than salicylate of soda.

All medicines which augment the formation of uric acid are injurious.

Haig is of the opinion that these facts prove that rheumatism is caused by the retention of uric acid in the organism. The uric acid being precipitated in the joints, causes them to inflame. Rheumatism and gout thus involve the same pathological process.

Garrod is opposed to this view of the subject, because he has never been able to establish the presence of uric acid in the blood of rheumatics. Haig claims that this absence of the acid in the blood is due to its precipitation in the joints.—*Le Bulletin Med.*

Excretion of Iron in Chlorosis.

In the *M. M. W.*, Hosslin gives his views on this subject. They differ very materially from those hitherto prevalent.

Careful investigation as to the number of blood corpuscles and as to the quantity of hæmoglobin in the blood in chlorosis, have shown that the changes in the blood of this disease are similar to those observed in cases of repeated small hæmorrhages. From this Hosslin concludes that chlorosis is not a congenital constitutional anomaly, but that it must must be due to some kind of hæmorrhage.

As in ordinary chlorosis no hæmorrhages are known to occur, they must be occult, that is, they must take place into the gastro-intestinal canal. To prove this, numerous analyses of the fæces of chlorotics were undertaken. It was found that in 40% of these cases, the amount of iron and the amount of hæmatin in the fæces was considerably increased. The amount of iron thus excreted amounted, on an average, to about as much as is contained in 11 grammes of hæmoglobin.

These occult gastro-intestinal hæmorrhages are, in the author's opinion, favored by a diminished amount of hydro-chloric acid in the gastric juice. He even thinks that there are cases of chlorosis which are caused by this deficient iron resorption alone.

The therapeutic lesson to be learned from this is very evident.—*Correspond. Blatt.*

Injections in Gonorrhœa.

℞ Salicylate of mercury, 0.01 grammes
Distilled water, - - 100. "
Mix and dissolve.

In acute gonorrhœa, injections of the above are made three times a day. The discharge usually stops at the end of two or three days, and then the injections are stopped.

If the discharge reappears, it is mucous in character, and disappears of itself in a few days.

In chronic gonorrhœa, the following solution is used as an injection:

℞ Salicylate of mercury, 0.05 grammes.
Distilled water, - 100.00 "
Mix and dissolve.—*L'Union Med.*

Abscess of the Liver.

Laveran reports that the abscesses of the liver of warm countries contain pus which has proved completely sterile, at least in the ordinary culture media.

Histological and bacteriological examinations have not revealed the presence of amœbæ or microbes in this pus.

Perhaps the microbes which cause the formation of an abscess of the liver die rapidly form a mixture of the bile with the pus. In certain cases of hepatic abscess, the pus is manifestly tinted by biliary coloring matter.

Perhaps also, the parasites which produce a liver abscess do not grow in the ordinary culture media.

The absence of pyogenic microbes, or at least the rapid destruction of these microbes in hepatic abscess, agrees well with the slow and insidious progress of these purulent collections.

If there are no microbes in these abscesses, antiseptic washing of the abscess cavity after an operation appears useless, especially since washing may cause accidents by breaking adhesions which are often very weak.—*La France Med.*

Treatment of Purulent Pleurisy.

The method of posterior pleurotomy of Walther (an incision two finger-breadths from the line of the spinous process) procures complete evacuation of the

pleural cavity when the patient lies on his back. This method of operating is scarcely more difficult than the classical method. It can be done by the aid of local anæsthesia with cocaine, without the use of a general anæsthetic.

As to washings of the pus cavity, it is necessary to distinguish that which immediately follows the operation from subsequent washings.

The former has only a mechanical action. It may not be indispensable, as in pleurisy with pneumococci, but it is almost always useful, and is never dangerous.

Subsequent washings ought to be avoided when possible, but if a general or local cause (as incomplete evacuation of the pus, gangrenous pleurisy, etc.,) reinfects the pleural cavity, then there need be no fear in having recourse to them.

I make these washings with biniodide of mercury 1 in 20,000, which have never caused poisonous symptoms.

In other cases, I have limited myself to injecting into the pleural cavity 4 grammes (ʒj.) of a 10% iodoform and glycerine mixture.

I have notes on three cases treated by the above method. In the first case, the pleura was cured in four days. In the second case, the fistula did not close until the fiftieth day. In the third case, which was one of tubercular pleurisy, there remained a permanent fistula.—*Le Bulletin Med.*

Poisonous Effects of Boracic Acid.

Lemoine states: Boracic acid is regarded as an antiseptic of which one has not in general to fear poisonous effects. It is used in medicine internally and in surgery externally in large amounts, and although no very grave accidents from its use have been recorded, it may provoke symptoms sufficiently serious. These symptoms consist of rubeolous eruptions, accompanied by vomiting, constant nausea, intense cephalalgia, and insomnia, without any elevation of temperature or acceleration of the pulse. At other times there may be general urticaria with vomiting and quiet delirium.

Substances Which Are Able to Dissolve Uric Acid.

Dr. Posner has investigated this subject. He used as a basis for his observations uric acid and the uric acid calculi passed by patients after they had taken certain medicaments.

He found that the ingestion of alkaline waters gives to the urine dissolving properties as regards uric acid. And also, that the solvent properties of alkaline waters are directly proportional to the amount of bicarbonate of soda which they contain.

The spring water of Vals possesses in this respect the greatest efficacy. It dissolves 10 centig. of uric acid for 100 gram. of urine, while destilled water under similar conditions dissolves only 4 centigrammes. This water contains a large percentage of carbonates of soda and other alkalies. Bicarbonate of soda in doses of 4 to 5 grammes a day gives almost the same results; but it is impossible to use this drug for as long a time as the mineral water.

Bicarbonate of lithia, citrate of potassium and borocitrate of magnesia have actions analagous to bicarbonate of sodium. Last in the order of usefulness comes borax.—*Arch. Hydrology.—Le Bulletin Med.*

Treatment of Phlyctenular Keratitis.

Phlyctenular keratitis (Troussard) is quite common in children. The principal danger is the transformation of the phlyctenula, after rupture, into an ulcer or abscess.

The treatment of phlyctenula consists of introducing into the eye, once a day, by means of a brush, a small lump the size of a grain of wheat of the following ointment:

℞ Yellow oxide of mercury, .25 (4 grains)
Vaseline, - - 5. (75 ")

Besides, three times a day there must be applied to the eye for 15 minutes warm compresses steeped in the following solution:

℞ Boracic acid, - - - - 12.
Water, - - - - - 300.

—*Le Bullet. Med.*

Virulence of Saliva Before the Onset of Rabies. —MM. Roux and Nocard (*Concours Medical*, Oct. 18, 1890) have made experiments with the view of determining whether persons bitten by an animal which shows no signs of rabies at the time of the bite, but "goes mad" three or four days afterwards, are in danger of developing hydrophobia. They point out that the onset of rabies in dogs, for instance, is not sudden; there are premonitory symptoms which generally do not excite attention. In particular, some days before the disease declares itself there is a rise of temperature without any change whatever in the appearance or ways of the animal. MM. Roux and Nocard inoculated dogs with rabic virus, and as soon as the temperature began to rise, they collected the saliva and injected it into healthy dogs. In this way they proved that at least three days before the animal showed any alteration in his condition, the saliva contained rabic virus, and produced rabies in animals inoculated with it. They conclude that a dog may communicate the disease by biting or licking when he himself appears to be entirely free from it.—*Br. Med. Jour.*

Keloid.—In the treatment of small keloid growths, Dr. Browning (*London Med. Recorder*), has obtained satisfactory results from the application of perchloride of mercury in collodion (1 in 30). The tumor is thickly coated with this application,which is allowed to remain on until it peels off, usually 5 or 6 days. Another coating is then applied, and so on, until, by successive coatings, the growth is reduced to a level with the surrounding surface.

WEEKLY MEDICAL REVIEW.

BRANSFORD LEWIS, M.D., EDITOR. W. C. MARDORF, M.D., ASSOCIATE EDITOR.

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THE OCCASIONAL ABSENCE OF URINARY CASTS IN NEPHRITIS.

It is frequently observed, that in spite of the most careful examination of albuminous urine, casts which ought to be present are not found. This was formerly the more surprising at the time when the simultaneous appearance of albumen and casts in the urine was regarded almost as a general law, says Dr. Sehrwald, in the *Deutsche Medizinische Wochenschrift* (*Deutsch. Med. Zeit.*). But Bartels as well as Bizzozero, the chief supporters of this view, soon granted that there were exceptions to this rule, and endeavored to find an explanation therefor. The latter now assumes that while albumen and casts appear in the urine at the same time, the casts remain for some little time in the kidneys, the albumen being excreted immediately. This, however, cannot be wholly true, for the observations of Bartels show that occasionally albumen and casts appear in the urine simultaneously. A supposition advanced to reconcile these two ideas is that as the kidneys do not secrete urine in the same quantities at all hours of the day, an occasional marked increase of secretion may wash out the casts from the kidneys, while with a decreased rate of flow the casts may remain in the renal tubules. According to this theory, however, the number of casts would increase according to the amount of urine passed, whereas observations show that often enough a large quantity of urine passed at one time is entirely free from casts.

There is another explanation, however, which is nearer to hand and is supported by physiology: According to the investigations of Heidenheim, the entire kidney is at no one moment of time in a state of activity; certain parts of the kidney secrete for a time and then cease, the work being then carried on by other sections of the kidney, which have been resting in the meantime. We may assume that the diseased kidney carries on its functions after the same fashion. In this way it may easily happen that during a certain period the urine is secreted by a comparatively healthy section of the kidney, and consequently contains but few casts or none at all, while at another time the secreting portion may be more seriously affected, and the urine secreted may show casts in abundance. However enticing this explanation may be, the investigations of Sehrwald show that it is not always just, although he admits that the facts are as stated, and may at times play a secondary part in explaining the absence of casts. Sehrwald asserts that casts are originally present in all albuminous urine, but that they are at certain times broken up and dissolved, leaving only the insoluble portions, as epithelial cells, etc. The question then arises, in what manner is this destruction and solution of the casts brought about?

In the first place, the ferments, micro-organisms, are able to wholly destroy casts. This process, however, requires considerable time, even when the room is at a high temperature. Moreover, the variation in the number of casts occurs in freshly-passed urine, so that this factor is not sufficient.

Of the ferments which are able to dissolve albumen or albuminous substances within the body there are but two which enter into the question, trypsin and pepsin; of these the former does not occur at all in normal urine, and pepsin, the only remaining agent, is, according to the author, the chief factor in bringing about this variation in the number of casts.

The facts on which Sehrwald bases his assertion are given in extenso, and must be read in the original; the salient points in the author's investigations may be summed up as follows:

1. If specimens of urine passed every hour of the day be examined, the number of casts may be found to vary to a marked extent, while the albumen remains in about the same proportion.

2. The specimens containing but few casts will be found to have a correspondingly increased number of epithelial cells and free cells. The casts which may be present are more pale, softer, and have smoother outlines than when they are present in abundance.

3. The occurrence of increased masses of detritus and a lessened number of casts, with a softened condition of the latter, indicate that casts have been redissolved in the urine.

4. This dissolving cannot be ascribed to chemical action, since the normal constituents of acid urine would tend rather to precipitate than to dissolve albumen.

5. The solution of casts is caused by the presence of pepsin in an acid urine. Pepsin has a proteolytic action in acid urine. Peptic digestion is able to dissolve casts, and does so, with but few exceptions. An increase in peptic digestion in the urine is accompanied by a decrease in the number of casts and *vice versa*.

6. The longer such urine is allowed to remain in the bladder, or, after being passed, in a room with a high temperature, the greater will be the destruction of casts.

7. The practical hints to be deduced from this are, to examine urine which has had but a short stay in the bladder; to allow it to settle in a low temperature and but for a short time, in order to exclude fermentation, and to and to it an excess of chloroform, for the same reason.

8. This peptic digestion may take place in the kidneys just as well as in the bladder, and may thereby loosen casts which are tightly fixed in the tubules, and cause them to be washed out into the bladder.

The Disinfection of the Hands.

A comprehensive paper on this subject is published by Dr. Franz Boll, of Konigsberg, in the *Deutsch. Medizinische Wochenschrift* (*Deutsch. Med. Zeit.*) of which we give an abstract. After coming to the conclusion that the infection of fresh wounds which frequently occurs was almost without exception caused by the contact of hands carrying the agencies of inflammation, a number of investigators exerted themselves to find out some method of disinfecting the hands, which should be sure and thorough and at the same time not too burdensome.

Kummell, who was about the first to take up the question, found that it was very difficult to disinfect the hands, but that it could be done by washing thoroughly with green soap and warm water, and then brushing with 5% watery solution of carbolic acid or chlorine. No other disinfectant gave as good results, not even a 1-1000 corrosive sublimate solution, according to his experience.

On the other hand, Forster, of Amsterdam, found that a sure disinfection of the hands was accomplished only by washing with soap and water, and afterwards with bichloride solution, 1-1000 or 1-2000, and that carbolic acid solutions, as well as solutions of chloride of zinc, boric acid, and chloride of iron, were less effectual. Kummell on hearing of this went over his experiments again, with the same results as before.

Furbringer then made the statement that the space beneath the finger-nails harbored numbers of germs even after the most careful disinfection, because the solutions used failed to penetrate. On this account he suggested that after washing with potash, soap and water, and before using the carbolic acid or corrosive sublimate solution (between which latter he detected no great difference), the hands be washed in 80% alcohol, in order to remove the "unholy and disinfection-hindering secretions of the skin" and so bring about an intimate contact of the disinfectant with the epidemis. His procedure was divided into four parts: (1) The nails are first cleaned while dry. (2) The hands and especially the subungual spaces are brushed for one minute with green soap and water. (3) They are then washed for one minute in 80% alcohol and (4) before this has had time to dry they are put into 30% carbolic solution or a $2^0/_{00}$ corrosive sublimate solution and brushed also for one minute.

After Landsburg's investigations brought him to the astonishing conclusion that though sterilization of the hands was possible, yet this result could not be counted upon with certainty, operators became somewhat dispirited, and each began to examine for himself.

Boll has now repeatedly tested in an experimental way the method used by Prof. Mikulicz in his practice for five years with the best results, at the request of the latter. His tests were carried out by infecting the hands with pure culture of the various pus-producing organisms, then employing Mikulicz' method of disinfection, and finally dipping the hands into culture fluids, and awaiting results. By these tests the author was forced to the conclusion that in the method named, it is above all, the combination of the two powerful antiseptics, carbolic acid and corrosive sublimate, which assures certain results.

The directions for this somewhat inconvenient but sure method of Mikulicz is as follows:

1. All dirt about the fingernails is removed with the knife or scissors.

3. The hands are brushed for three minutes with warm water and green soap.

3. The hands are then washed for half a minute in a 30% carbolic acid solution, and afterwards in a $^1/_{2000}$ bichloride solution for the same length of time.

4. Finally, the ungual folds and the subungual spaces are rubbed out with iodoform gauze dipped in a 5% solution of carbolic acid.

Later Tests of Orexine as a Stomachic.

Podgorski, of Krakau (*Przeglad lekarski—Deutsch. Med. Zeit.*) tested six persons as to the digestive and motor activity of their stomachs, and after finding them normal, he caused orexine, the new and much-vaunted stomachic, to be given twice daily, .3 grams in the morning, and .5 grams in the afternoon, in pills containing each .1 gram. In four of the subjects the normal acidity of the stomach contents was increased by one-eighth to one-fourth, but the appetite did not seem to be influenced in the least. If, however, the withdrawal of part of the gastric contents for the purpose of testing same was omitted, a distinct increase of appetite could be noticed in three of the subjects after each dose.

Of fourteen phthisical patients with want of appetite treated with orexine, no good influence was apparent in eight of them (one was nauseated, another vomited), in four the appetite was only momentarily increased (although the dose was increased to .5 three times daily) and in but two cases was there a constant increase of appetite after each dose.

Of fourteen other cases (one of acid gastritis, one of carcinoma of the stomach, and twelve with other than stomach troubles), nine were uninfluenced, the appetite

was momentarily increased in one, and constantly increased in four. Out of the first nine four vomited after each dose (among them the two with gastric troubles), and one had vertigo, tinnitus aurium, and flushing of the face after the second dose of .3 grams. Of the cases in which the appetite was increased, the result could in two be safely ascribed to the improvement in the general condition which was taking place at the same time.

If orexine really possesses any influence upon appetite and digestion, it shares this influence with other drugs, irritants of the gastric mucous membrane, which also temporarily increase the acidity of the secretions. Orexine is not only an irritant of the mucous membrane of the stomach, but also of the conjunctiva, nose and mouth.

Bela Imredy (*Orvosi Hetilap.*) found that out of a number of cases, orexine caused vomiting in twelve, and had good results in nine, the other results being all negative.

Gluckziegel, of Prag (*Prag. Med. Woch.*), on the other hand, found good results in a majority of his cases.

Dr. Beckh (*Munch. Med. Woch.—Deutsch. Med. Zeit.*), after an experience of twenty cases, regards orexine worthy of notice as a stomachic, and recommends it in anæmia and tuberculosis, and also in chronic affections of the stomach, as catarrh and nervous dyspepsia. On account of its strongly irritant properties, it is contra-indicated in gastric ulcers and the like. The drug showed itself of great service in anorexia, no matter what the disease might be to which it was due. Orexine, in the form of the muriate, is best given in capsules, in doses of .25, one of which often increases the appetite to a marked extent. If there is no effect, the dose should be repeated, and perhaps doubled.

Though these results are in general moderately favorable, it still remains to be shown that the drug is worthy of the high enconiums lavished upon it on its *debut.* Practitioners will doubtless continue to use their time-honored remedies until better reasons are shown for changing.

Tincture of Nicotiana in Diphtheria.

The fact that smokers are, as a rule, more exempt from contagious diseases than non-smokers has been frequently noted by many observers. Dr. S. Schwitzer, of Neuhausel (*Centr. f. d. ges. Ther.*), has also made this observation, especially in the case of infectious diseases located in the throat, and in gypsies, who form a large part of the population in many Hungarian cities. He ascribed the result to tobacco, and therefore employed in his cases of diphtheria a solution of tobacco of his own preparation, and this because he had not found a satisfactory remedy in the drugs he had usually employed (corrosive sublimate, resorcin, lactic acid, aqua calcis, and chlorate of potash). He says that his results were so favorable that he could not refrain from circulating them. Taking by preference the empyreumatic, oily, sticky substance which is found in the stems of pipes after long usage, he mixed with 2 to 2½ grams of this 35 or 40 grams of alcohol, and filtered, after allowing it to stand 24 hours.

He has used this tincture for eight months in sixty cases of diphtheria, occurring in children of various ages, applying it locally with a brush. The effect was so satisfactory that he was seldom obliged to use other local remedies, or internal treatment. The fever usually declined by several tenths of a degree shortly after an application. Intoxication symptoms were never observed; the patients bore the application well, and the latter did not seem to be unpleasant. Of the sixty so treated, seven died, three from complications. He also occasionally ordered as a gargle a 1% watery infusion, which rendered excellent service, and proved better than the ordinary gargles.

He states that he was led to use this remedy by noticing that during the cholera epidemic in 1866, tobacco-chewers were but rarely attacked, and the gypsies never.

We can not refrain from saying that we hope the doctor did not allow himself to be led into exaggeration, although we are far from desiring to throw cold water on any new discovery in therapeutics.

MEDICAL ITEMS.

Death of Dr. Jaminet.—Dr. Louis A. Jaminet, one of the oldest practitioners of the city, died on Dec. 17, at his residence, 3008 N. Twenty-first street.

The Death of Surgeon-General Baxter.—In the death of Surgeon-General Baxter both the army and the medical profession have suffered a great loss. His previous training in the subordinate medical positions of the army had fitted him admirably for the high station to which he was worthily appointed, and which he held for such a brief period. His natural abilities were of no common order.

A Mother at Sixty.—An old Swedish woman, living near Lapeer, Mich., recently gave birth to her first child after having been married 38 years. The woman claims to be 60 years of age. The baby, a boy, weighed only 3 pounds at birth and was shrivelled, but otherwise healthy. The woman says that she was born when her mother was 52 years of age, and that her grandmother gave birth to twins at the age of 63.

Hot Water in a Hurry.—Very often a physician needs hot water in the middle of the night when there are no conveniences at the house of his patient to obtain it. Especially is this apt to be the case in summer time. If there should be a kerosene lamp handy with a chimney having a corrugated top this want can be easily

met. Place an ordinary tin cup with a sufficient amount of water upon the top of the chimney. The corrugations let out the heated air so that the lamp will not smoke and the water will quickly become hot. This is often a great convenience, and it is astonishing how quickly the needed hot water can be obtained. As a practical thing it may serve a useful purpose.—*Dixie Doctor.*

A Test for Water.—The following is given as a test for the purity of drinking water: Dissolve half a teaspoonful of the purest white sugar in a pint bottle completely full of water to be tested, tightly stopped; expose to day-light, and temperature up to 70°. After a day or two examine, holding the bottle against something black, for floating specks, which will betray the presence of organic matter if in considerable proportion.

Persistence of the Typhoid Bacillus in the Body.—Chantemesse reports a case of typhoid fever with relapses extending over five months, says the *Brooklyn Med. Jour.* Orloff has published a case in which a pure culture of the typhoid bacillus was obtained from an osteo-myelitic abscess nine months after the beginning of the affection. Achalme has reported a similar case. These cases are rare, but they teach the possibility of prolonged infection in typhoid.

Impure Ice.—The New York State Board of Health speaks as follows of the relation between impure ice and disease: "Ice formed in impure water has caused sickness; it may contain from 8 to 10% of the organic matter disolved in the water, and in addition a very large amount of organic matter that had been merely suspended or floating in it; it may contain living animals and plants ranging in size from visible worms down to the minutest spores, and the vitality of those organisms may be unaffected by freezing."

The Medico-Legal Importance of Hypnotism is now undergoing a thorough test in the courts of Paris in the very dramatic and sensational trial in which the lives of a man and a woman are involved.

They murdered, by strangulation, one Gouffé, who had been lured to his death by the woman, Gabrielle Bompard. Her defense is that she was acting under the irresistible hypnotic influence exercised over her by her partner in crime, Eyraud.

The result will be watched with much interest.

Syphilitic Infection from a Bite.—"A patient was recently shown to the Berlin Medical Society who was said to have contracted syphilis from the bite of a man. The bite was inflicted on the lip, and the wound healed in two or three days, but in six weeks it reopened and the lip became greatly swollen. Five weeks later there was an ulcer on the inner surface of the lip with great swelling and induration round about; the submaxillary and cervical glands were also much enlarged. After some time a typical syphilitic eruption made its appearance. By the use of mercurial frictions the swelling both of the lips and of the glands was considerably reduced."—*Brit. Med. Jour.*

More Cures for Consumption.—The lay press announces that two distinguished Michigan physicians have discovered a cure for tuberculosis. They are Dr. E. L. Shurley, physician to Harper Hospital, of Detroit, and Dr. Heneage Gibbs, of the Michigan University of Ann Arbor, well known to the profession through his little book on Practical Pathology and Microscopy, issued some years ago.

It is said that the doctors have been working for the last year on the process, and have at last attained results which are entirely encouraging.

We are not yet informed as to the nature of the new method.

Longevity.—The medical profession is not usually considered one favorable to extreme lonevity, but a retired naval surgeon—Deputy-Inspector General Robert McCormick— has just died at the age of 90. He was a pupil of Sir Astley Cooper, and was surgeon to several arctic and antarctic expeditions. His Arctic and Antarctic experience extended from 1827 to 1853. In the former year he accompanied Sir Edward Parry in the Hecla in his attempt to reach the north pole. He was chief medical officer and naturalist to the Antarctic expedition of 1839-43, and commanded the boat expedition in search of Sir John Franklin in 1852.

Female Medical Society in Russia.—On November 5, the newly-founded Society of Medical Women for Mutual Help, the statutes of which were ratified on September 23, held its first meeting at St. Petersburg, under the presidency of Dr. A. N. Schabanowa of that city. The Society already numbers 55 members, and its funds amount to 637 roubles (about £105). The following ladies were elected members of the Council: Drs. Kaminskaja, Kasakewitsch, Maljarewskaja, Olchina, Pawlowskaja, Tarnowskaja, Schabanowa, and Schmemann. Madame L. A. Rodstwennaja-Schenjawskaja, who has done much for the promotion of medical education for women, was unanimously elected an honorary member of the Society. The members allowed to have the floor at one time is not stated. The condition of the secretary after calling the roll is something too horrible to contemplate without a shudder.

Rapid Dilatation of Urethral Strictures.—Dr. P. Setter reports the following modifications of Le Fort's method, as practiced in Brun's clinic. After induction of anæsthesia a filiform bougie is passed through the stricture. A well oiled catheter is then screwed to the bougie and carefully inserted, using the latter as a guide. The dilatation is kept up from five to fifteen minutes, after which the catheter is withdrawn

and replaced by one of larger caliber. This is followed by a third and fourth, and if the resistance is not too great, the largest-sized instrument can be introduced. This method is contra-indicated in tight strictures where too much resistance is encountered, in cases where the urethra is very sensitive, and finally in cases where rapid relief is required. Aside from these, the method is excluded in comparatively wide, or in impermeable strictures.—*Centralbl. f. d. Gesammte Therapie.*

BOOK REVIEWS.

[NOTE.—Any of the following books may be obtained by addressing J. H. Chambers & Co., 914 Locust Street, St. Louis, Mo. The pamplets are obtainable by application to the author.]

A TEXT-BOOK OF COMPARATIVE PHYSIOLOGY, for Students and Practitioners of Comparative (Veterinary) Medicine. By Wesley Mills, A.M., M.D., D. V. S., Professor of Physiology in the Faculty of Human Medicine and the Faculty of Comparative Medicine and Veterinary Science of McGill University, Montreal, etc. New York: D. Appleton & Co. 1890.

The purpose of this work is given by the author in the preface, which says:

"Some years of contact with students of comparative (commonly called veterinary) medicine, and a fair knowledge of the actual needs of the practitioner of this department of the medical art, have convinced me that the time has fully come when the text-books of physiology provided for students of human medicine, and which the former classes have hitherto been compelled to use, should be replaced by works written to meet their special events and possibilities. In fact, so different from man are most of the animals which the veterinarian is called upon to treat, and therefore to understand, in health as well as in disease, that only the absence of suitable works of special character can justify the use of those that confessedly treat man alone."

This position has been conformed by the appearance, within the last year or two, of other books of a similar character, the larger text-books of Animal Phrenology, by the author of the present work, and by Professor Smith. These have shown the trend of students and practitioners of veterinary medicine towards a wish to obtain a more scientific and accurate basis for their practice in this department; and the work under discussion will undoubtedly further their wishes in this respect. It treats more especially of the physiology of the *domestic* animals. The context is most excellently rendered, and the illustrations, 476 in number, colored and plain, are superb. No practitioner of veterinary medicine should be without this book.

OINTMENTS AND OLEATES, ESPECIALLY IN DISEASES OF THE SKIN. By John V. Shoemaker, A.M., M.D., Professor of Materia Medica, Pharmacology, Therapeutics, and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, etc. No. 6 in the Physicians' and Students' Ready Reference Series. F. A. Davis, Publisher, Philadelphia and London. 1890.

This is the second revised and enlarged edition of a work which first appeared in 1885. It is thorough and comprehensive, and includes formulæ compiled from all accessible sources, from foreign states, colonies, etc. With each formula the mode of preparation and therapeutical applications are given in proper order. For convenience as a reference-book on the subjects of which it assumes to treat it can scarcely be surpassed. The volume is bound in cloth, and presents a neat and attractive appearance.

EPILEPSY: ITS PATHOLOGY AND TREATMENT. By Hobart Amory Hare, M.D., (Univ. Penn.) B. Sc., Clinical Professor of the Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania; Physician to St. Agnes' Hospital and to the Children's Dispensary of the Children's Hospital; Laureate of the Royal Academy of Medicine in Belgium, of the Medical Society of London, etc. F. A. Davis, Publisher, Philadelphia and London. 1890.

This book, No. 7 of the Physicians' and Students' Ready Reference Series, is one of which it is difficult to say much except in commendation. The book embodies the views on the subject of epilepsy held by the representative members of the profession, and is, in fact, the essay which was deemed by the Royal Academy of Medicine in Belgium worthy of a prize of four thousand francs. Every page bears the mark of Dr. Hare's well known ability and previous training. While the number of works on this subject is almost without end, and is increasing daily, persons who desire to be well informed would do well to acquire a copy of this volume. The subjects treated are taken up in the following order: Synonyms, Definition, History (a very comprehensive subdivision); the numerous varieties of epilepsy are taken up, after which comes the consideration of Etiology, Heredity, Sex, Age, and other influences; Reflex Etiology and Toxæmic Epilepsy are next considered; then comes the Etiology of Symptoms, Pathology, Diagnosis, Prognosis, Treatment, and finally, Minor Considerations and Complications.

ESSENTIALS OF PRACTICE OF MEDICINE. By Henry Morris, M.D., Late Demonstrator, Jefferson Medical College; Visiting Physician to St. Joseph's Hospital; Fellow College of Physicians, Philadelphia, etc., with an Appendix, on the Examination of Urine, by Lawrence Wolff, M.D., Demonstrator of Chemistry, Jefferson Medical College. W. B. Saunders, Philadelphia. 1890.

This book, a double number of Saunders' Question Compends, can hardly fail to be of great practical ser-

vice, both to the student and practitioner. The standard set by previous numbers of the series is fully maintained, and as we have said before, while they do not and are not intended to take the place of the larger text-books, yet as hand-books and aids they have a value that must not be overlooked. The appendix on the Examination of the Urine, by Wolff, is excellent, and includes the latest methods of examining the urine, microscopically and chemically.

The table of urinary colors, after Vogel, is a feature that life insurance examiners in especial, and other practitioners as well, can not fail to appreciate.

Wood's Medical Monographs. Vol 7, September, 1890. Containing:

I. Insomnia and Its Therapeutics. By A. W. McFarlane, M.D., F.R.C.P., Edin; F. R. M. and C. Society of London; Examiner in Medical Jurisprudence in the University of Glasgow, etc.

II. Index for Vol. VII.

Vol. 8, No. 1, October, 1890:

I. Suppuration and Septic Diseases. By W. Watson Cheyne, M.B., Hunterian Professor; Surgeon to King's College Hospital and to Paddington Green Children's Hospital; Examiner in Surgery at Edinburgh University.

II. Pharmacopœia for Diseases of the Skin. By James Startin, Senior Surgeon to the London Skin Hospital; Consulting Surgeon to the Sheffield Public Hospital for Skin Diseases.

III. The Nasal Neuroses. By Granville Macdonald, M.D., Physician to the Hospital for Diseases of the Throat.

IV. Artificial Respiration. By Benj. W. Richardson, M.D., F.R.S., London.

V. The New-Born Infant: Its Physiology, Hygiene and Nourishment. By Dr. A. Auvard, Paris.

VI. The Urine in Neurotic Diseases. By Dr. Alexander Peyer.

Vol. 8, No. 2, November, 1890:

I. Treatment of Uterine Affections by Massage. By Dr. Eugene Arendt.

II. Cosmetics: A Treatise for Physicians. By Dr. Heinrich Paschkis, Docent at the University of Vienna.

II. Affections of the Stomach in Diseases of the Male Genital Organs. By Dr. Alexander Peyer, Schaffhausen.

Published by Wm. Wood & Co., 56 and 58 Lafayette Place, New York. Monthly, $1.00 each; $10.00 a year.

A feature which is evidenced in all this excellent series of monographs, is that they embrace subjects which are not included in the larger text-books commonly in use—subjects which are left for medical journals to handle, and yet which are manifestly too large to be presented comprehensively by such media. These monographs occupy, therefore, a ground midway between medical journals and text-books. And again, the subjects of which they treat frequently lie just on the outskirts, as it were, of practical medicine; which again cannot be studied in irregular medical books—but how essential it is for the physician to be posted on them!

For example, a knowledge of the points to be gained from the monograph on Cosmetics may be of very great practical use to the physician whose aid is so frequently sought with reference to the betterment of complexions, etc.

For similiar reasons, the monographs on Artificial Respiration, The Physiology of the New-Born Infant, The Urine in Neurotic Diseases, Insomnia and Its Therapeutics, and Affections of the Stomach in Diseases of the Male Genital Organs, are especially valuable.

Post-Mortems. What to Look For and How to Make Them. By A. H. Newth, London. Edited with numerous notes and additions by F. W. Owen, M.D., formerly Demonstrator of Anatomy, Detroit College of Medicine. Cloth, 12mo., postpaid, $1.00. The *Illustrated Medical Journal Co.*, Publishers, Detroit, Mich.

This book is replete with information that every person interested in necroscopy should have at easy command. It has not been designed to take the place of large works upon pathology, by its authors, but to present, in a tabulated way, with quick side-head references, all the important conditions of an organ met with post-mortemly, either in health or disease. To the country physician, who makes autopsies infrequently, it is especially valuable; also to the medical student who is occasionally in the "dead house" of the hospital. It is the only brief work of the kind now at command. The American editor has made a great many examinations for Court uses, and he has added numerous important notes to the text of the English author. Besides the ordinary conditions met with after death, there are chapters devoted to the post-mortem appearances seen in those poisoned, drowned, hanged or cases of infanticide. It will thus be of great use in these classes of "suspected deaths." Full directions are also given for exposing the organs advantageously for their complete examination.

Saunders' Question Compends. Philadelphia: W. B. Saunders, 913 Walnut St. Price, cloth, $1.00; interleaved for notes, $1.25.

I. Essentials of Gynæcology. By Edwin B. Cragin, M.D., Attending Gynæcologist to the Roosevelt Hospital, O. P. D.; Assistant Surgeon to the New York Cancer Hospital.

II. Essentials of Minor Surgery, Bandaging and Venereal Diseases. By Edward Martin, A.M., M.D., Instructor in Operative Surgery, University of Pennsylvania; Surgeon to the Howard Hospital; Assistant Surgeon to the University Hospital; Author of "Essentials of Surgery."

III. Essentials of Pharmacy. By Lucius E. Sayre,

Ph.G., Professor of Pharmacy and Materia Medica, of the School of Pharmacy of the University of Kansas.

For assistants in preparing for quiz classes, these books are most admirable. The embrace one of the most serviceable features of the quiz-class, that of indicating to the mind of the student the special points that are to be grasped and retained. The student is naturally incapable of doing this efficiently.

The compend on Minor Surgery, Bandaging and Venereal Diseases, is one of the best of the series, and does credit to its able author.

The latest views of gynæcologists are included in the compend on Gynæcology.

SAUNDERS' POCKET MEDICAL LEXICON. Being a Dictionary of Words and Terms used in Medicine and Surgery. Collated from the Highest Authorities and brought up to the present date. By John M. Keating, M.D., Fellow of College of Physicians, Philadelphia; Visiting Obstetrician to Philadelphia Hospital, etc., and Henry Hamilton, Author of "A New Translation of Virgil's Aenced into English Rhyme," etc., with addenda consisting of etymological factors, comparative tables of metric and apothecaries' weights, a list of poisons and their antidotes, and abbreviations used in prescriptions. Philadelphia: W. B. Saunders, 913 Walnut St. 1890.

Students will surely appreciate the issuance of this lexicon—the first that has appeared for some time. The need for a lexicon up to the times has consequently been strongly felt.

The list of etimological factors will be of great service in giving the beginner in medicine ready clues to the meaning of words which, without it, he would probably be compelled to look up many times.

In the lexicon proper, the accenting of syllables is given, but pronunciation is neglected; this we think is a mistake that obtains with most of such works. Entirely too little attention is given to the proper pronunciation of medical terms.

THE LATIN GRAMMAR OF PHARMACY AND MEDICINE. By D. H. Robinson, Ph.D., Professor of Latin Language and Literature, University of Kansas. With an Introduction by L. E. Sayre, Ph.G., Professor of Pharmacy in, and Dean of, the Department of Pharmacy, University of Kansas. Philadelphia: P. Blakiston, Son & Co.

Being firm believers in the higher standard of general education, towards which the profession is rapidly tending, we naturally endorse the use of such a book as this only in a qualified manner. We believe, of course, that a regular and extended course in Latin should be pursued by every student of medicine or pharmacy; but we are compelled to look at the conditions as they *are;* not as they should be. Feeling, then, that *some* knowledge of Latin is better than none at all, and recognizing the fact that many students will not devote the time requisite for the more thorough groundwork, we believe that there is a place for this little hand-book. It is the intention of the author, by the method presented—one which is easily grasped—to furnish sufficient information of the Latin language to answer the needs of those for whom it was written; it teaches simply medical Latin, with enough of pronunciation, declensions, conjugations, translations, etc., to fill the purpose aimed at quite efficiently.

WEEKLY MEDICAL REVIEW POCKET REFERENCE BOOK AND VISITING LIST. Perpetual. Medical Review Association, St. Louis. Price, $1.

The editor of this list evidently has a correct conception of the wishes of the profession when he says: "In compiling this little reference book, the endeavor has been made to keep in mind the wants of the practitioner *at the bed side,* and to gather together here such matters as will be most helpful in every day or occasional emergencies which he encounters. It is intended merely to aid the memory in such directions as experience has shown special need. It is believed that the arrangement of the printed matter and of the blank pages is such as to make this the most convenient visiting list now offered to the profession."

The book is very neatly bound in red leather, is of convenient size, not too bulky, and altogether is well put up. A full list of the contents will be found in our advertising pages, and need not be repeated here.

THE MEDICAL BULLETIN VISITING LIST, OR PHYSICIAN'S CALL RECORD. F. A. Davis, 1224 Filbert street, Philadelphia. Price, No. 1, $1.25 net.

This call-book is arranged on an original plan, and one that will be prized by many physicians. A column on the left of the page is reserved for the names of the patients; to the right of this is a column for noting the ledger page, and further on, are the spaces for every day in the month, arranged on "stub" leaves, so that the necessity of transferring names from week to week is obviated, and space is economized, leaving room for special memoranda on the opposite page. Many useful notes, tables, etc., are furnished in the first part of the list.

THE PHYSICIAN'S VISITING LIST (Lindsay & Blakiston's) for 1891. Twenty five patients per day or week, $1.25. P. Blakiston, Son & Co., 1012 Walnut street, Philadelphia.

This is another conveniently arranged pocket list, bound in black leather. Besides the blank leaves for recording visits, etc., useful notes are presented, pertaining to methods of artificial respiration, poisons and antidotes, systems of weights and measures, dose table, new remedies, treatment of diseases of the eye, eruption of milk-teeth, disinfectants, examination of urine, transportation of injured persons, etc.

A Compend of Surgery for Students and Physicians. By Orville Horwitz, B.S., M.D., Demonstrator of Anatomy in Jefferson Medical College, Philadelphia. Third edition. Illustrated. P. Blakiston, Son & Co., Philadelphia.

While believing that Quiz-Compends are so much abused as to make their use of questionable value, yet, as they seem to have gained a firm hold on the medical students, we are glad to see them prepared by competent and careful men. In the volume before us the subject seems to have been as well handled as could be expected in so brief a space. While etiology and pathology have received perhaps not their due share of attention, treatment and symptomotology are quite fully treated. Among the chapters which have seemed to us best are those on venereal diseases, dislocations and fractures. The classification of tumors is arranged in a neat and easily remembered manner. On the whole, the book seems fairly well suited to its purpose.

The Physician's Companion. A pocket reference book for physicians and students. By C. A. Brice, M.D., editor of *The Southern Clinic*, author of "Medical Advice to Young Men," "Brice's Visiting List" and "*The Southern Clinic* Visiting List," etc. 1890. Richmond, Va., *The Southern Clinic.*

This little work—essentially one of practical information—is designed, we suppose, to furnish the physician and student with material to occupy his leisure moments of street car riding, waiting at a depot, etc. It is small enough to go into almost any pocket and hence gives no inconvenience, if one chooses to have it with him all the time. While we think that in some particulars it is rather ambitious for a work of this kiud, on the whole its scope is confined to the object aimed at. Many useful hints on treatment, prescriptions and practical suggestions are incorporated.

Transactions of the Texas State Medical Association.

The transactions of the meeting of this association, held at Fort Worth, Tex., April 22 to 25, 1890, comes to us handsomely bound in cloth, with the lone star beaming a Texas greeting. Amongst the subjects embraced in the many interesting papers are:

An Explanation of the Phenomena of Immunity and Contagion, Based on the Action of Physical and Biological Laws, by J. W. McLaughlin, M.D., Austin.

Is Dentition a Factor in Infantile Disease? By Dr. E. J. Ward.

Five Cases of Cranial Surgery, by H. L. Fountain, M.D., Bryan.

Observations on the Utility of Constitutional Treatment in the Chronic Diseases Peculiar to Women, by Thos. Moore Madden.

Cerebro-Spinal Meningitis, by J. D. Bursch, M.D., Aurora.

Our Troubles as a Profession—Their Cause and Cure, by C. M. Ramsdell, A.M., M.D., Lampasas.

The Treatment of Chronic Tubercular Consumption and the Importance of the Recognition of its Curability, and Early Diagnosis and Prompt Diligent Treatment by Home Hygiene and Drugs, by Q. C. Smith, M.D., Austin.

Alcoholics in the Practice of Medicine, by F. E. Yocum, M.D., Shreveport, La.

Some Abuses of Gynæcology, by Henry K. Leake, M.D., Dallas.

The Necessity of Special Study on the Part of the General Practitioner, of Medicine and Hygiene and Infancy, J. W. Carhart, M.D., Lampasas.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland. Semi-annual session, held at Hagerstown, Md., November, 1889. Ninety-second annual session held at Baltimore, Md., April, 1890.

The material contained in the transactions of this association is always valuable; the present volume does not depart from this rule. The subjects embodied are as follows:

Some Practical Points on Hernia, by Robt. W. Johnson, M.D.

Double Popliteal Aneurysm Cured by Ligature, by J. Edwin Michael.

Typhoid Fever, by Jos. T. Smith.

Origin and Treatment of Pus Accumulations in the Female Pelvis, by Thos. A. Ashby.

A Review of Hypnotism, by Geo. J. Preston.

Persistent Headaches, and How to Cure Them, by Julian J. Chisholm.

President's Address: The Modern Hospital, by Aaron Friedenwald.

Reports in Sections on Surgery, Practice, Obstetrics and Gynæcology, Materia Medica and Therapeutics, Ophthalmology, Jurisprudence, Psychology, etc.

Transactions of the American Dermatological Association at its fourteenth annual meeting, held at Richfield Springs, New York, September 2 to 4, 1890. Geo. T. Jackson, M.D., Secretary, 14 East Thirty-first street, New York.

The transactions contain: The Address of the President, Dr. P. A. Morrow.

Observations on Prurigo, Dr. R. W. Taylor.

A Clinical Study of Pruritus Hiemalis—Winter Itch, W. T. Corlett.

A Study of Pruritis, E. B. Bronson.

Cases of Cutaneous Tuberculosis, With Histological Studies, J. T. Bowen.

Remarks on the Treatment of Dermatitis Herpetiformis, L. A. Duhring.

Immigrant Dermatoses, J. C. White.

Electrolysis in the Treatment of Lupus Vulgaris, G. T. Jackson.

Treatment of Erysipelas, C. W. Allen.
Report on Aristol, C. W. Allen.
Notes on Pilocarpine in Dermatology, H. G. Klotz.
Remarks on the Richfield Waters in the Treatment of Skin Diseases, C. C. Ransom.

SELECTIONS.

PASTEURISM BEFORE THE ACADEMY.

It was really Pasteur's system of preventive inoculation that was under discussion at the New York Academy of Medicine on the evening of October 16, although various aspects of the subject of rabies were made the theme of remarks, even the question of the existence of that disease. The few who have always maintained that there was no ground for regarding rabies as a disease *sui generis* seem to have been re-enforced to a certain extent by the carpers who assert that no such number of cases as recent reports have enumerated can possibly have occurred. The two classes together have been able to keep up enough opposition to the beneficent practice of antirabietic inoculation to breed some distrust of it among the public, and even to influence professional opinion against it in a measure, as is exemplified by the fact that many well-known medical journals have shown an inclination to discredit it. But what is there for the cavilers to stand on? To say that there is no such disease as rabies argues, to our mind, the possession of a child-like simplicity worthy of the votaries of "Christian Science," or of those wiseacres who are fond of repeating, whenever dread of any epidemic disease is expressed, the vulgar dictum that a person is safe enough from pestilence if he is not afraid of it, ignoring the mortality caused by it among infants, who, of course, have no dread of disease. Little more worthy of consideration is the criticism that the number of rabies reported since Pasteurism came into vogue is ridiculously out of proportion to the numbers reported in previous times. From no point of view could this objection be held to be cogent, for it does not touch the real question, but at most could only operate to discredit the reporter's accuracy. Perhaps rabies has been unusually prevalent in France during the past few years, but, if it has not, the great popular interest in it that has been brought about by the adoption of Pasteur's system may well have given rise to increased diligence in discovering and reporting the cases. We cannot admit that the cases reported are so numerous as to preclude their being accounted for in this way. But, allowing that the figures are exaggerated, the admission proves only either that Pasteurism has not saved quite so many lives as the reports show, or else that the figures have been falsified purposely or ignorantly, and therefore that their promulgators are open to the verdict *falsus in uno, falsus in omne.* This last is probably what is sought to be implied, but the implication may well be disregarded by Pasteur and his associates. The results of their inoculations are in no wise influenced by the degree of their accuracy or honesty in collecting statistics. The plain fact remains that hundreds of persons bitten by animals, unquestionably rabid, have escaped the disease. It will not do to say that only a certain percentage of such persons are infected, for nothing like that percentage of infection has obtained among the exposed persons on whom Pasteurism has been tried.

This expresses what we have maintained ever since the practise was begun, but its opponents have been persistent and talkative, and we confess to much gratification at the general drift of what was said at the Academy's meeting. In particular, it strikes us that Dr. Dana's paper on "The Reality of Rabies" shows such a spirit of fairness and such close reasoning as must go far to silence the last sputter of incredulity, or as would, at least, if men were influenced more by reason and less by prejudice or an innate propensity to oppose whatever is new. Unfortunately, doctrines that tend to overturn established dogmas and practices always have to contend against very much the same kind and degree of opposition, but they invariably become established on a basis all the more solid, and it is, therefore not a matter of unmitigated regret that Pasteurism has had to encounter the same obstacles.—Ed. *N. Y. Med. Jour.*

PARACENTESIS IN INTERNAL HYDROCEPHALUS.

The author exhibited a case of acquired chronic internal hydrocephalus, for the relief of which he undertook paracentesis after trephining. The patient was a boy nearly 5 years old. He was seized with convulsions when 3 months old, and these attacks, which became very frequent, continued for 9 months and then ceased. Three months after their commencement his head became enlarged. Every form of treatment had been tried, but without the least success.

Condition at the time of operation as follows: He was obviously imbecile; he could not talk, but smiled idiotically; he was totally blind; the other special senses were not apparently affected. He had never walked or stood alone, but could easily move his body and extremities. His bowel and bladder sphincters were not controlled. He was extremely irritable and restless. He was fairly developed physically, but always of an ashy pallor. There was a very frequent rotary movement of the head, with slight retraction and grinding of the teeth.

The anterior fontanelle closed when he was 18 months old, and the sutures had ossified at the usual time. The measurements of the head gave 12½ inches from the glabella to inion; 13¾ inches over the biauricular line; 20 inches around the fronto-occipital line. December 4, 1888, the author operated upon the case. Under the most careful antiseptic precautions, with a trephine

about 1 centimeter in diameter, a button of bone was removed from over the coronal suture, about 1½ inches to the right of the median line. A very delicate trocar was passed through the dural membrane into the brain-substance, downward, backward, and inward, to the depth of 1½ inches, the object being to pierce the central cavity of the right lateral ventricle. About an ounce of a clear limpid fluid, closely resembling cerebrospinal fluid, was evacuated, and, as the trocar was withdrawn, a small quantity of the same kind of fluid escaped from the subdural space. For several days the same fluid continued to ooze from the puncture in the dura, and it was estimated that from 4 to 8 ounces was thus discharged.

The case progressed satisfactorily. In 2 or 3 days he could stand alone, and he was gradually able to walk alone across the room, which he did in about 3 weeks. There was a partial restoration of sight. He became more attentive and seemed to understand better. He was less irritable and he slept well. The rotary movements of the head ceased. However, there was no development of speech, nor were the sphincters under any better control. The author believes that more fluid will have to be evacuated, as the patient is not quite so active now as some time after the tapping.

The chief difficulty lies in our inability to determine which cavity to evacuate. For instance, if the fluid resides in both cavities, and the normal openings between them, through the foramen of Majendie, and those behind the roots of the glasso-pharyngeal nerves be closed by inflammatory exudation, or the presence of a tumor, then to tap only the subdural space would remove the external pressure, and allow such an expansion of the internal fluid as would perhaps lacerate the brain-tissue. Or the same effect might be produced by evacuating only the ventricular fluid. This may have been the cause of death in some of the reported cases.—Dr. Ayers in *Am. Lancet.*

PROEESSOR KOCH'S SUBCUTANEOUS SYRINGE.

This syringe consists of a graduated glass cylinder with a conical glass point ground to fit a hollow needle; and a hollow rubber ball, to which is fitted a stop-cock. To fill the syringe it is taken apart, and the cylinder

filled from the upper end, after which the upper half is fitted on. The stop-cock remains closed until the needle is under the skin and everything ready, when the injection is made by squeezing the bulb. The syringe is made by E. Kraus, Kammandanten Str. 55, Berlin, S.

Resuscitation of the Apparently Drowned.—For the revival of persons who have been nearly drowned, two chief methods (with numerous slight modifications of each) are in use: the "Sylvester" and the "Marshall Hall." In 1863, a committee appointed by the Royal Medical and Chirurgical Society of London, to consider the rival claims of the two methods, reported in favor of the method of Sylvester, on the ground that the amount of air introduced into healthy lungs by this method was double that introduced by the method of Marshall Hall. The committee recommended that the body should be placed at an angle of thirty degrees, face downward, with the head lower than the feet, the mouth being open and the tongue drawn forward. The escape of fluids might be assisted by slight pressure on the back. After a few seconds the body should be laid back downward with a cushion under the shoulders, the tongue hanging out of the mouth. About fourteen times a minute the arms should be drawn above the head and then lowered and pressed, by the elbows, against the chest.

In the Transactions of the above mentioned society for 1889, Dr. Bowles criticises very earnestly the conclusions of the committee, which had been endorsed by the society. The committee based its report upon experiments made with the empty lungs of animals. The physician, however, has to deal with human beings whose lungs are filled with fluid, mixed with air in a blood-stained froth. Under these conditions the most useful method must provide not only for the inspiration of air, but also for the escape of this frothy liquid from the deeper air-passages. The sudden introduction of a large quantity of air by the Sylvester method is injurious, because at the same time the froth is drawn deeply into the finest tubes, which before contained a little air. By the Marshall Hall method, however, the air is introduced gently and in small quantities, and the froth is not drawn in more deeply, but is gradually expelled with each expiratory movement. Dr. Bowles supports his statements by the recital of a number of cases which he has treated.

After the patient has been placed for a moment with face downward to allow the escape of water from the mouth and throat, he is turned on the side and kept on that side continuously, except when (about fifteen times a minute) the body is rolled for a few seconds upon the face again. By keeping the same side always up the lung on that side becomes clear. Turning first one and then the other side up is dangerous, because thereby the partly cleared lung is suddenly flooded with fluid from the lung which was downward. It is better to clear one lung entirely than to have both half cleared. Each time the body is turned upon the face a little more froth and water escapes from the mouth and nostrils. If one lung is thus cleared it may escape the inflammation which results from the inspiration of water. When the upper lung has been almost cleared, Dr. Bowles finds it useful to raise the upper arm above the head as in the Sylvester method, since the entrance of larger

quantities of air into the lung is now safe. Pressure on the back at each pronation assists the escape of water somewhat, and it has a good influence on the heart, aiding the propulsion of blood toward the lungs. The continued use of the prono-lateral method is an excellent mode of keeping the pharynx clear of obstruction. —*Med. Rec.*

Cystitis.—One of the commonest ailments among women which the general practitioner is called upon to treat, and which seems to be peculiarly prevalent in this class of patients, is a troublesome cystitis, due possibly to derangements of the pelvic circulation. Not rarely a very considerable amount of difficulty is experienced in overcoming the affection, which not only disturbs the rest of the sufferer, but often also very seriously affects her mental state, causing her to be irritable nervous, and a source of discomfort to all around her. For the treatment of such cases, resort has been had to innumerable remedies, and success has been claimed in this connection for the most dissimilar drugs and methods. Most frequently the cause of the distress is a vesical catarrh, the cure of which affords more or less complete relief of the condition. At other times the treatment which is found to be called for is constitutional rather than local; and cases are also met with that necessitate a union of both procedures. To this probably it is attributable that the recommendations of different practitioners cover so wide a range of ground; while it explains, too, the reputed success of those who claim to have met with good results from the employment of medicines newly introduced into the Pharmacopœia. The drug most lately reported as being curative of the form of cystitis in question is salol; and three obtinate cases which were completely cured by its administration are described by Dr. Abbot in the *Boston Med. and Surg. Jour.* Each of the patients had been suffering for a considerable time, and had been treated with palliative means with more or less success, but without any permanent relief being obtained. The dose of salol given was 10 grains 3 times a day, and in each, marked improvement of the symptoms was very speedily observed. One most satisfactory feature in the history is the rapidity with which the cure was effected, a week or 10 days sufficing to bring it about in all three instances. When we remember that even months of treatment by other means may terminate in disappointment, it may well be considered that a method which promises so favorably deserves the widest possible trial, and no doubt the usefulness of the drug in question will soon be tested on a larger scale than has hitherto been the case.—*Medical Press.*

Tuberculosis, Scrofula and Lupus.—Dr. Lingard has made some important experiments for the medical department of the Local Government Board, as to the relationship of tuberculosis, scrofula and lupus. Koch, as is well known, has stated that the bacillus tuberculosis is present in all three, but the incontestable clinical differences seemed to many to detract from the value of his observations. Dr. Lingard has, as it seems to me, pretty conclusively proved that the clinical diversity is due, in part at least, to a difference in the virulence of the bacillus. Arloing had advanced evidence in this direction some years ago, but his results were controverted. Dr. Lingard finds in guinea pigs, that subcutaneous inoculation of tuberculosis material leads to the death of the animal from general tubercular in about 80 days; inoculation, with scrofulous material, has the same result in about 200 days, and with lupus material in 330 days. Further, he has found that animals inoculated in series, die at progressively shorter intervals. Taking all his experiments together, he obtained the following averages: Guinea pigs A, inoculated with scrofulous materal (caseous glands or cold abscess), died of general tuberculosis in 206.3 days; guinea pigs B, inoculated from A's, died of general tuberculous in 131 days; guinea pigs C, inoculated from B's, died of general tuberculosis in 79.5 days, and guinea pigs D, inoculated from C's, died of general tuberculosis in 60.1 days. A considerable agitation is on foot at present with regard to the propriety of permitting the sale of the flesh of animals affected with tuberculosis in any form. The question of compensation to breeders and butchers constitutes the main difficulty, and there is considerable difference of opinion among sanitary experts; the more thorough-going maintain that tubercle anywhere ought to lead to the condemnation of the whole carcass, while others hold that a slight amount of tubercle, affecting only the lungs, pleura, or other viscera, ought not to prevent the flesh being passed. Except to the eaters of very underdone beef, the matter is not one of first-rate importance; but it is altogether different with regard to milk, and it is probable that power will be obtained by sanitary boards to forbid the sale of milk from cows suffering from tuberculosis in any form, but especially, and above all, from mammitis.—*Correspondent Occidental Med. Times.*

Glandular Tumors of the Neck.—Dr. J. W. White (*Ther. Gaz.*) says:

1. Lymphatic enlargements, situated in the neck and dependent on constitutional causes, may arise from syphilis, carcinoma, and lymphadenoma.

When from *syphilis*, they affect by preference the posterior chain of glands, are small, freely movable, painless, bilateral, and yield readily to specific treatment.

If *carcinomatous*, they form a very hard, rapidly growing mass, infiltrating surrounding parts, becoming fixed to every thing beneath it, involving the skin, causing serious pressure symptoms, and followed by the development of cacchexia. Operative treatment is useful, though only palliative.

If *lymphadenomatous*, they are rounded, regular

movable, painless, elastic or fluctuating, do not affect the skin, and are associated with anæmia, leucocythæmia, and with enlargement of other and widely removed lympathatics and of the spleen. The treatment should be tonic and supporting. Operative interference is useless.

2. *Scrofulous adenitis* is essentially a tubercular inflammation of glands, occurring usually in young persons with a scrofulous or phthisical family history, and with some form of local irritation superadded, which must be sought for in the mouth or pharynx or about the face or head. The glands are all characterized by a tendency to caseation, with or without suppuration, and from indolent masses, less defined, more fixed, and more tender than in lymphadenoma. The treatment in recent cases should be first hygienic and tonic with fixation of the head, and, if possible, with cure of the proximate cause. If this fails, or without attempting it in old cases, excision should be resorted to.

3. *Simple adenitis* results from some source of local irritation, and constitutes an acute, tender, inflamed, poorly-defined swelling, running a rapid course to either suppuration or resolution. Treatment should consist in removal of the cause and in the application of resolvent lotions or ointments, or, later, in the free evacuation of pus.

Sterilization of Rubber Catheters.—Dr. Alepy (*Annales des Maladies des Organes Genito-urinaries*, July, 1890) describes a new method of effecting the sterilization of these instruments, which possesses, he asserts, the merit of being very effective, easy to carry out, and harmless to the instruments. After drawing attention to the effects of various antiseptics, such as carbolic acid, sublimate, etc., and heat as ordinarily applied, he goes on to describe his own plan, which practically consists in wrapping up the instruments, not more than three or four in a packet, in ordinary blotting paper. the ends of which are just twisted up. These packets are then placed in glass tubes, the mouths of which are sealed with a plug of cotton wool. The glass tubes are exposed for half an hour to ordinary steam, that is, to a temperature of 100° C. The packets of blotting paper are then removed, and kept in a drawer or box till they are required for use. They remain sterilized for any length of time provided the paper is not opened, as is shown by the fact that they are incapable of infecting either sterilized bouillon or sterilized urine.—*Br. Med. Jour.*

Rates on Surgical Chairs.—The Inter-State Commerce Commission have ordered that the present rate on surgical chairs be reduced, in less than carloads, from double first-class to first-class, or a reduction of about one-half in the rate. This was what the rate was formerly for a long period of time, and until recently, when it was advanced to double first-class, under the analogies of classification.—*Medical Record.*

USEFUL FORMULÆ.

Infantile Constipation.—Bouchut gives the following syrup in the constipation of infants:

℞ Podophyllini, - - - - gr. ¾.
Alcoholis, - - - - grs. lxxv.
Syr. altheæ, - - - - ℥iij.—M.

A desertspoonful is giveb daily.—*L'Union Medicale.*

Chloralamid may be given as follows:

℞ Chloralamid, - - - gr. xiv.
Acid. hydrochlorici dil., - - gtt. vj.
Syr. rubi idæi, - - - - ℥ij,
Aquæ, - - - - - ad ℥ij.

M. S.: To be taken in one or two doses.—Steele, in *K. C. Med. Index.*

Diuretic.—

℞ Tinct. digitalis, - - - ʒijss.
Potassi iodid, - - - - ʒij.
Tinct. opii comp., - - - - ℥ss.
Syr. pruni Virg., - - - ℥ij.
Syr. scillæ, - - - - - ℥j.

M. S.: A teaspoonful every four hours.—Laramee, in *L'Union Med. du Canada.*

Nutritive Enema.—M. Jaccoud's nutritive enema (*Jour. Am. Med. Assoc'n*), is made as follows:

℞ Beef broth (freshly made), - ℥viij.
Wine, - - - - - - - ℥iv.
Yolks of eggs, - - - - ℥ij.
Dry peptone, - - - - ʒj-iv.—M.

Sig.: Mix and make an enema, to be injected in small portions at intervals during the day.

Salve for Hæmorrhoids.—The following is an excellent salve for hæmorrhoids:

℞ Muriate cocaine, - - - grs. xx.
Morph. sulph., - - - - " v.
Atrop. sulph., - - - " iv.
Pulv. tannin, - - - - " xx.
Vaseline, - - - - - ℥j.
Ol. rosæ, - - - - - q. s.

M. S.: Apply after each evacuation of bowels. Of course, contents of bowels should be kept in soluble condition.—*Medical Mirorr.*

Desquamation After Scarlet Fever.—Dr. Louis Starr advises the following treatment during the stage of desquamation:

Anoint the entire surface of the body, including the scalp, daily, with an ointment of

℞ Acidi carbolici, - - - grs. xx.
Thymol., - - - - grs. x.
Vaselini vel ung. simp., - - ℥j.

Then put in a warm bath for five minutes, protecting from cold, and put to bed, wiping the body dry beneath the bed-clothes. This has the effect of hastening desquamation and of disinfecting and preventing the dispersion of the scales, which are active vehicles of the contagion.—*Archives of Pediatrics.*

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